UNINHABITED AND FREE FROM WORK: AN ENVIRONMENTAL AND FEDERAL LAND-USE POLICY HISTORY OF GLACIAL LAKE ATNA WILDERNESS, ALASKA

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Abstract

The Glacial Lake Atna area, a valley between the southern Alaska and Wrangell mountain ranges in Southcentral Alaska, despite its appearance today as remote, thickly forested, and seemingly "wild" in character, has a 10,000-year history of human habitation. The first peoples in Alaska made encampments and harvested subsistence resources on the shores of the glacial lake and its margins, while today residents and visitors to the region continue to inhabit, hunt, fish, gather berries, cut firewood, and generally subsist from the land in ways remarkably similar to their prehistoric forebears. Humans and nature have a long, shared history in the thirteen million-acre Glacial Lake Atna region, and yet, since the mid-1980s, amid the modern-day conservation movement to protect so-called wild places, the region has been bordered and patrolled in ways that separate humans from nature. Wilderness policies under the National Park Service and Bureau of Land Management suggest that wilderness areas are inherently pristine, devoid of human inhabitation, and without the imprint of human work. Alaska lands acts, most specifically the Alaska National Interest Lands Conservation Act of 1980, while allowing for subsistence, did not adequately address work and inhabitation. This thesis questions such policies and, through archaeological, historical, and policy analyses of humans and nature in the region, argues wilderness has never been truly uninhabited and free from work. The idea of "wilderness" lacks introspection as these areas contain quite a lot of human history, and indeed wilderness is a construct of romanticism and post-frontier ideologies.

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Introduction

This paper explores the history of one wilderness, legally designated, but also straightforwardly so: thickly forested, vast, and inhospitable, of topographic prominence and of geographic isolation. The central character in the following chapters is not a single person, nor peoples, nor is it a government, an idea, or a political process (although these things contribute to the history). Instead, this paper focuses on the Glacial Lake Atna valley, a wilderness of the northern boreal forest which is situated in between Alaska's interior Wrangell Mountains and the high mountain passes near Landmark Gap in the Alaska Range. Here, a proglacial lake formed over fifty-eight thousand years ago and while the lake has long since drained, it defined the hydrology and geomorphology of the valley for millennia. It is an area the size of Lake Ontario, perhaps larger during glacial maxima. Today, the area maps as a wide, beautiful, yet little-heard of, valley in South-Central Alaska a few hundred miles west of the Yukon border and roughly two hundred miles north of Anchorage.

This wilderness also has an interesting human story to tell. For even as the history of Glacial Lake Atna conjures up an image of isolation and natural forces, the earliest visitors made temporary encampments around Glacial Lake Atna's shore. The first peoples likely reached Glacial Lake Atna upwards of 10,000 years ago, and evidence of their existence remains as archaeological and geologic artifacts left behind in the lake-bottom. Near the lake's former northern shore, bounded to the north-west by the Alaska Range, and stretching for miles to its eastern shore beneath the volcanic Wrangell Mountains, archaeological cultural chronologies indicate a complex human history. While no one knows for sure exactly when the first human reached Glacial Lake Atna— either by way of the coast, to the south by the Gulf of Alaska, or from the north, across the Bering Land Bridge— it is certain that someone did at least several

thousand years ago. Millions of years of glacial movement created long, stable esker ridges along Glacial Lake Atna's shore, overlooking the waters below. Following the esker system, one or more humans picked their way, trending north-south in seasonal rounds, likely walking along footpaths through the boreal forest and alpine tundra. When there was game, they hunted. When game was obscured, they sat atop esker ridges, sharpened their tools from obsidians, cherts, and basalts, and waited. By their feet, seated at temporary encampments and outlook sites, they left behind a discarded pile of reduction flakes. Occasionally, someone abandoned on the earth's surface a larger tool, a projectile, long, thin, and lancelet-shaped.

Glacial Lake Atna's shoreline now exists as a thin lip of rounded cobbles and sand jumbled on the side of river bluffs, on glacial esker ridges, and discontinuously wrapped around the modern Copper River Basin at about a three thousand foot elevation. Where the shore was prehistorically edged by a continuous lake, the forested valley is now closed by kettle ponds and ox-bowed rivers. The ground underneath is made of the same geologic elements, however. Sediments underlay thick moss and alpine tundra vegetation. Today, a person can hike up the eskers ridgelines in Glacial Lake Atna's lake-bottom to the prehistoric shoreline. It is a quick thirty-minute drive eastward on the Denali Highway to the Delta Wild and Scenic River wayside parking lot. From there, hunters slam shut the doors on a heavy-duty F250 pickup. They can drive right up to the Tangle Lakes area and hunt the lake margins. On foot or by ATV, hunters wind into the backcountry nearer to the prehistoric shoreline. In early September, the low-growing cranberry bushes turn a golden-red and the deciduous dwarf birch provide just enough cover to watch for game coming to drink from the ponds below. One man is hunting caribou. Just as he splays out, knees in the cobbled gavels, he shoots from his 30.0 Bolt Action, brass is ejected from the chamber and where it lands he leaves it. Extensive big-game hunting takes place

every fall in the Tangle Lakes. Subsistence hunters from across the state come to take a shot at the herds of caribou migrating south. By October, lying on Lake Atna's shore, separated by thousands of years, two objects lie side-by-side: this hunter's spent rifle casing and, just feet away, a bifacial projectile point dated upwards of 11,000 years old.

Throughout millennia of change— through the Pleistocene-era thaw from the last Ice Age, Glacial Lake Atna's swell and its draining, the seasonal infrastructure of native fish-camps and winter villages, the boreal forests taking root in Lake Atna's lake bottom and germinating dense spruce stands, the intrepid explorations of Alaska's first Euro-Americans, Alaska Statehood, the creation of the Alaskan National Parks, Preserves, and the Wilderness Preservation System, and the mechanization of 21st century outdoorsmanship— something essential about about human relationships with nature has remained unchanged. Humans have hunted in the Glacial Lake Atna wilderness for thousands of years in exactly the same places for essentially the same purpose. Thus, this thesis addresses wilderness and the many individual humans who traveled through wilderness. Furthermore, it considers the humans who have labored, hunted, hiked, and perhaps were born and died in this place.

The twenty-first century environmental ethos, a fundamental tenet of which is *pristine wilderness,* is recently being scrutinized for its grasp on wild places that inherently involve quite a lot of human history. Environmental historian William Cronon begins his treatise on wilderness in the collection, *Uncommon Ground,* by suggesting that "the time has come to rethink wilderness."[1] While "this will seem a heretical claim to many environmentalists, since the idea of wilderness has for decades been a fundamental tenet" of the American ethos, he continues, it is

[1] William Cronon, "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature," *Environmental History* 1, no. 1 (1996): 1.

necessary.[2] Wilderness policy has essentially driven a wedge between humans and the lands from which they originate. The 1916 National Park Service Organic Act—remembered mostly as an unquestionable triumph, "America's Greatest Idea!," in the view of some—describes wilderness as a place totally free from humans. The Wilderness Act of 1964, and complementary wilderness policy acts, set in place a system of categorizing nature that deemed it "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain" and where "the imprint of man's work is substantially unnoticeable."[3] While wilderness is to be enjoyed by the American people—it is to be enjoyed *just so.* Designated wilderness bars "improper" use. Wilderness is bordered; its resources are monitored. It is described as a place totally unhindered and wild. It is free from human inhabitation and free from work. In order to "re-think" wilderness, and better understand the human relationship with nature, this thesis explores the two major fallacies of wilderness management: 1) that wilderness is uninhabited, and throughout history has been imagined so; and 2) that wilderness is free of work; it is a place of leisure; that it is devoid of man's imprint, and that if it should contain labor, it is in the form of archaic work: trekking, camping, hunting by spear and bow-and-arrow.

Indeed, the term "wilderness" itself suggests that nature is somehow removed from the human experience and set aside. When humans talk about nature in the singular—"Nature is…," or "Nature does…,"—they strip away its multidimensionality and imply that it is stable and pristine. However, nature is not a singular. It cannot be wholly sullied, nor can it be wholly pure. Least of all is wilderness uninhabited. The idea of wilderness, especially pristine wilderness, is a human-conceptualization, crafted out of romanticism and post-frontier ideologies. Environmental historian Richard White suggests that nature contains a deep multifariousness and, "to

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[2] Ibid.

[3] Wilderness Act of September 3, 1964, U.S Public Law 88-577, 78 Stat. 890 [hereafter cited as Wilderness Act].

paraphrase Donald Worster, [includes] salmon swimming, the river flowing, and, I would add, humans fishing."[4]

Today, the Glacial Lake Atna wilderness is divided between the federal land agencies of the U.S. Department of the Interior. Legal boundaries often reference prehistoric geographic features: to the northwest, the Gulkana Wild and Scenic River has its headwaters in the Tangle Lakes Archaeological District (managed by the Bureau of Land Management under the Federal Land Policy and Management Act of 1976). From the Tangle Lakes, the river system flows south, circumnavigating three towering peaks of the Wrangell Mountains and crossing into the Designated Wilderness boundary within Wrangell-St. Elias National Park and Preserve (managed by the National Park Service under the National Park Service Organic Act of 1916.)

Captured wilderness policy has created, perhaps unintentionally, a method of bordering and patrolling wilderness in the Glacial Lake Atna area. In the mid-1980s, amid the conservation movement to protect wild places, Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) of 1980 established allowances for customary and traditional uses in federal wilderness. Congress created Title VIII in order to rectify the notion of captured wilderness policy whereby federal agencies would be "captured," or influenced, the by the interests it was supposed to regulate (such as logging, mining, or livestock grazing interests) while still allowing humans to hunt, fish, and work in wilderness. Despite best efforts to balance wilderness management with Alaskan land use practices, however, the history of Alaska federal lands was fraught with conflict. Amid the scramble to allot wilderness lands following Alaska statehood, early National Parks and Preserves in Alaska, rather than being unique from the state-side parks and post-frontier conservation ideals, were accused of sharing an overwhelmingly anti-hunting

[4] Richard White, *The Organic Machine,* (Seattle: University of Washington Press, 1995), 3.

bias with "outside" park managers.[5] Wilderness areas within Alaska, like elsewhere, developed management schemes that define wilderness as uninhabited and free from work.

Chapter One of this thesis investigates the geologic origins of Glacial Lake Atna. It also studies deep archaeology and the first peoples of this area to understand how they lived and worked in wilderness. Chapter Two examines the Alaska frontier period and the work of explorers and sportsmen; it investigates ideas on wilderness over time and the origins of conservation in Alaska. Chapter Three investigates the legal and political history of Alaska lands acts and the methods by which the Bureau of Land Management and National Park Service manage the Glacial Lake Atna wilderness. Federal wilderness management plans unevenly allow for motorized access in the area. ANILCA's Title VIII allowances have not changed the way in which people think about wilderness. Instead, policy has created inconsistencies regarding how we think about various forms of work: those appropriate in wilderness—archaic work, like hiking, rafting, camping, recreating—and the "inappropriate" work that uses machines, especially to hunt or fish.

Research Questions

This thesis investigates Glacial Lake Atna, one wilderness area in south-central Alaska bound between the Alaska and Wrangell Mountain Ranges. This thesis provides a deep history, built from observations of the wilderness and tells the story of Glacial Lake Atna as far back as the geologic and archaeological record will allow. It examines who the first people in this wilderness were, from where they came, and how they lived. This thesis also examines the

[5] Theodore Catton, *Inhabited Wilderness: Indians, Eskimos, and National Parks in Alaska* (Albuquerque: University of New Mexico Press, 1997), 1-7.

modern human counterpoint to prehistoric peoples: present-day hunters, fishermen, and subsistence users in the Glacial Lake Atna wilderness. By looking at the 10,000-year history of this one place in Alaska, this paper analyzes the relationship between humans and wilderness over time.

Three questions guide the research: 1) how have human conceptualizations of "wilderness" changed over time? Has wilderness, in the image of pristine naturalness, always been the ideal; if not, from what historic influences is environmentalism shaped? 2) Do designated wilderness areas, or areas created per the Wilderness Act of 1964, contain human history? More specifically, is wilderness *uninhabited* and *free from work*? Finally, this thesis asks, 3) how has the idea of wilderness influenced federal land management strategies in the Glacial Lake Atna wildness area? While the Glacial Lake Atna is a single, continuous area ecologically and culturally, it is now divided between two federal land management agencies. Thus, this paper specifically investigates two federal management strategies and questions how Wild and Scenic River (BLM) and Designated Wilderness (NPS) policy in the Glacial Lake Atna wilderness allow for human inhabitation and work.

Literature Review

The history of wilderness encompasses an immense breadth of study. This thesis is primarily a natural history of Glacial Lake Atna, and is grounded in the work of leading scholars in the field of environmental history, archaeology, and comparative environmental policy. The literature on humans and nature is extensive—ideas on nature transcend academic disciplines as various environmental historians, anthropologists, ecologists, geo-biologists, and many more

have added to the domain of natural history. Natural histories might consider human and non-human organisms, flora, fauna, fungi; natural histories might encompass scientific inquiry but are not limited to it. In antiquity, "natural histories" treated nearly anything connected to nature—Pliny the Elder's encyclopedia from circa 77 A.D., *Natural History,* wove together postulations on nature with observations on astronomy, medicine, and superstition.[6] Classical humanities have divided nature between the *humane*, or natural, and *divinity,* approaching each through the study of texts. The Industrial Revolution spawned the field of geology and elemental biology with an eye toward natural resource extraction. Modern methods of resource extraction and natural resource use have given way to a counter movement, conservation, which holds that resources should be scientifically managed and their extraction carefully planned in accordance with long-term sustainability of the resource. Thus, natural histories, this thesis included, contain some environmental policy narrative analysis. This history leads to a comparative analysis of NPS and BLM wilderness polices and their implications for humans and nature in these areas.

In 2012, environmental historian Donald Worster, in "Doing Environmental History," a volume of documents and essays regarding the future of environmental history edited by historian Carolyn Merchant, set forth a comprehensive understanding of environmental histories by dividing them into three main categories.[7] Each category is dedicated to a central question that environmental historians investigate. The first addresses the history of the natural world itself. This includes the history of wildernesses throughout time, including the study of pre-history and deep history and wilderness. The second addresses human interactions with the environment, specifically in the form of work, labor, and the socioeconomic organizations and

[6] Pliny the Elder, *Natural History: A Selection* (London: Penguin Classics, 2004) 1-10.
[7] Donald Worster, "Doing Environmental History," in *Major Problems in American Environmental History: Documents and Essays,* ed. Carolyn Merchant (Boston: Wadsworth Cengage Learning, 2012), 4.

relationships that grow out of that work. Worster notes that the history of wilderness, which in this context is defined as areas the U.S. government has legally designated as having "wild" character free from human presence or intrusion, must necessarily deal with the transformation of environments in perhaps extractive ways. The third section, is the uniquely human conceptualization of wilderness. This category includes the mental deliberations that go into deciding what wilderness is and what it is not. This thesis uses Worster's organization as foundational for theoretical discussions on wilderness. It also elaborates on the ideas presented by historian William Cronon in "The Trouble with Wilderness, or Getting Back to the Wrong Nature," in which he urges historians to "re-think" wilderness. Thus, to rethink the Glacial Lake Atna wilderness area, this thesis begins in the same manner as Worster by examining: 1) the history of the Glacial Lake Atna environment itself; 2) its history of work and inhabitation, and 3) how human concepts regarding this wilderness have changed over time.[8]

The history of nature itself, or wilderness itself, is foundational to environmental histories. The history of wilderness might be told by examining the dynamic ecology of past environments or studying of how environments change over time. It might incorporate scientific data—for example, statistical data on ocean tidal movements, wind patterns, or the movement of tectonic plates.[9] Worster points out that historians can greatly benefit from scientific study and ecology. He notes that "change over time," exemplified in Chapter One of this thesis, which describes the Holocene-era Little Ice Age transition, is a fundamental problem in environmental histories as ecological transition periods are difficult to delineate. Not all natural phenomena present ecological change suddenly, precisely, or as a result of one ecological shift.[10]

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[8] Cronon, "The Trouble with Wilderness," 1.
[9] Worster, "Doing Environmental History," 4.
[10] Ibid.

Indeed, recreating a prehistoric or past environment is inherently difficult, given that the environment under study has ceased to exist. Only so much information can be gleaned from the standard primary source materials that historians use: diaries, census records, and journal pages, for example. William Cronon, in *Changes in the Land: Indians, Colonists, and the Ecology of New England,* argues that cultural and ecological consequences are deeply integrated. In fact, he argues that one should examine the past with the tool kits of, in this example, both a historian and ecologist.[11] His research provided an invaluable service through broadening the historian's archive by using scientific data to reexamine history. He notes in his first chapter that many of the early written descriptions of the New England environment, such as those made by William Wood in the mid-1700s, make no mention of hemlock trees along the wooded ponds and river valleys. He argues that the "full portrait of ecological change" in colonial New England raises intriguing questions, questions which are both empirical and theoretical and follow "directly from the imprecision of the data: traveler's accounts and other colonial writings are not only subjective but often highly generalized…" and it "could be the natural tendency for colonists to apply European names [for example] to American species which only superficially resembled their counterparts across the ocean."[12] The problem of "fuzzy nomenclature," or inaccurate but still valuable sources, creates further "problems" for environmental historians.[13] Cronon explains that the fossil pollen record shows, instead, that the hemlock has long been a component of New England forests. By examining the scientific pollen data and tree rings, biologist discovered that the new colonists had misidentified hemlocks as either walnut trees, firs, or pines.

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[11] William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill & Wang, 1983), 1-5, 16, 34-40.
[12] Ibid.
[13] Ibid.

Finally, Cronon notes that there are further ecological changes that might affect the environment but that have left little to no historical evidence: microscopic changes in soil composition, changes in precipitation rates, changes in wind patterns, for example.[14] Chapter One of this thesis reconstructs the prehistoric environment through similar source material—archaeologic, geologic, and scientific data to overcome the "problem" of investigating nature and ecological changes over time.

Worster's second category of environmental history explores human interaction with the environment, in the form of labor and work, and the complex socio-economic relations that grow out of that work. Worster explores the contributions of other academic fields to environmental histories, such as anthropology and cultural ecology. He makes specific reference to historian Julian Steward's *Theory of Culture Change* in order to further explore the idea that all histories are rooted in the human effort to "derive subsistence from nature," i.e., to work in nature.[15] While Worster's overarching theory revolves around the ecological effect that subsistence economies produce (i.e., material culture), his primary point that work and nature are irrevocably intertwined by simple human tasks such as hunting, fishing, and farming is well made. Richard White, in his essay "Are you an Environmentalist or Do You Work for a Living?: Work and Nature," published in 1995 in an anthology of Environmental History edited by Cronon, further discusses the implications of work in nature.[16] He stresses, much as Worster does, that human work cannot be removed from nature. He notes that nature is "known" by simple human labors—humans know nature by feeling the changing of seasons, they known nature by walking through

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[14] Ibid.
[15] Worster, "Doing Environmental History," 4.
[16] Richard White, "Are You an Environmentalist or Do You Work for a Living?: Work and Nature," in *Uncommon Ground: Rethinking the Human Place in Nature,* ed. William Cronon (New York: W.W. Norton & Company, 1995), 176.

mud, climbing hills, working with their hands, etc. However, he makes a more nuanced point about nature and humans when discussing legally designated natural areas such as National Parks. According to White, the modern perception of wilderness is increasingly alienating and egalitarian whereby National Parks and Designated Wilderness areas per the Wilderness Act prohibit work. Humans are, however, allowed to "play" in wilderness areas.[17]

In this way, environmental histories are also complicated by the socio-economic relations that grow out of non-work. Leisure became associated with economic elitism and created a rift between those who can afford to play in National Parks, or play in nature, and those who work in nature, such as loggers, ranchers, and miners. White concludes that saving an old-growth forest, for example, is a defeat for loggers as much as it is success for campers and hikers. The work of local people who use wilderness for extractive purposes has essentially been devalued by the environmental moment. Chapter Three of this thesis addresses work in nature, while also treating the idea of play in wilderness. It observes that work can also be divided into many categories of "archaic" and modern work, complicating ideas of work, humans, and wilderness.

Lastly, environmental histories involve a uniquely human category beyond the immediacy of human existence in nature: human conceptualizations of nature.[18] Cronon, in "The Trouble with Wilderness," notes that part of rectifying the "problem of wilderness" is understanding what wilderness is and what it is not, recognizing how humans have defined wilderness throughout time, and inquiring how humans have come to covet wilderness resources.[19]

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[17] Ibid.
[18] Worster, "Doing Environmental History," 4-5.
[19] Cronon, "The Trouble with Wilderness," 7.

The early nineteenth-century historians R. G. Collingwood and Raymond Williams were among the first social historians to initiate the discourse on wilderness.[20] Collingwood considered whether *Man* and *Nature* are singularities and whether it is indeed possible to extract the history of the one from the other.[21] If pristine wilderness exists, then it must be able to exist outside of human history, he concluded. He identified the fallacy of removing wilderness from the history of human actions and instead proposed a single essence or principle: *Nature*. He writes: "When nature herself, as people learned to say, became a goddess…we had something very different from the spirit of the wind and sea and forest and moon."[22] This school of thought went so far as to ascribe nature with a sense of agency, as can be seen in Collingwood's words: "All at once Nature is innocent, is unprovided, is sure, is unsure, is fruitful, is destructive, is a pure force and is tainted and cursed."[23] Anthropomorphizing nature in this way suggests that wilderness can exist as something actively endangering or resisting humans. It is all the more striking that, as Raymond Williams, writing in 1980, expressed it, this "singular abstracted and often personified principle, based on responses to the physical world, had, of course, a competitor…in the singular [which is humans]."[24] Williams recognized this counter-movement, *against nature,* and was skeptical of the school of thought that relied on its foundational logic. For example, histories represented by Frederick Jackson Turner's Frontier Thesis, among others, imagined humans and wilderness as separate entities and pitted against one another. Men, impelled by civilization, conquered the wilderness and thereby brought democracy to the West.

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[20] R.G. Collingwood, *The Idea of History* (Oxford: Oxford University Press, 1866), 73-74; Raymond Williams, *Problems in Materialism and Culture: Selected Essays* (New York: Verso Classics, 1997), 70-74.
[21] Collingwood, *The Idea of History, 74.*
[22] Ibid.
[23] Ibid.
[24] Williams, *Materialism and Culture,* 72.

Turner's thesis uses language that describes people "compelled" to "fight" the wilderness.[25] Personifying nature as a singularity additionally ascribes to wilderness the agency to be "acted against," contained, cherished, destroyed, or preserved; it allows for "man [to have a] precise place in the order of creation," Williams pointed out.[26]

The history of wilderness, thus, includes the political and social methods by which humans have constructed it: the deliberations that have gone into mapping wild places, when and how we drew boundaries, how we have defined the resources therein, monitored them, and disapproved of certain activities deemed to degrade those resources. Ideas presented in Turner's thesis would later spawn the declentionist narrative in history, which insinuates that by warring against the environment wilderness becomes less-so. Cronon points out that ideas on wilderness have changed radically over time, noting that biblical references to *wilderness* were frequently synonymous with *wasteland.*[27] White further questions how Judeo-Christian mythology has influenced thoughts on wilderness over time.[28] If the garden of Eden was regarded as the truest nature in the twentieth-century ethos, he notes, and it was marked by purity and virility, then any human manipulation of nature was perceived as being adverse. Cronon, through a detailed analysis of American historical figures and nature writers such as John Muir, Henry David Thoreau, and Bob Marshall, asks whether modern ideas on wilderness are a product of romanticism and post-frontier ideologies.[29] Decades of American wilderness theory have ever changed the way that the conservation movement operates. Decades of wilderness theory have

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[25] Frederick Jackson Turner, *The Frontier in American History* (New York: Holt, Rinehart and Winston, 1962) 8-12.
[26] Williams, *Materialism and Culture,* 71.
[27] Cronon, "The Trouble with Wilderness," 7.
[28] White, "Are You an Environmentalist?" 176-82.
[29] Cronon, "The Trouble with Wilderness," 7-9.

driven the conservation movement towards a position that human work is destructive of wilderness.

Worster concludes in his final category with a call to revisit assumptions about human interactions with nature that have presented a central problem in environmental history: that there are very different ways of "knowing the environment," perspectives held by different peoples, different cultures, different generations, and that the historian must "also grapple with the problem of monotheistic representation of one 'people' or another."[30]

This thesis has relied on these intellectual giants as I have examined the history of Glacial Lake Atna up to the present implementation of polices promulgated by two separate federal government agencies, which treat human presence and work in wilderness areas disparately. My work makes a new and distinct contribution to the literature by providing a history of the region and comparative analysis of these two agencies' policies.

This thesis addresses the many relationships that various groups of humans have had with nature over time. Chapter Two recounts the history of ideas on wilderness, beginning with humans regarding wilderness as something fearsome, to be cut back by the first Euro-American explorers in Alaska (as noted by Turner). Historian Theodore Catton, in *Inhabited Wilderness: Indians, Eskimos, and National Parks,* investigates the conservation period in Alaska and explores how wilderness became to be coveted, "pristine" natural places under National Park Service management, which are protected at all costs.[31] He points out that the National Park idea of "uninhabited wilderness" is inherently flawed as Alaska Natives have been living on the continent for thousands of years.

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[30] Worster, "Doing Environmental History," 6.
[31] Catton, *Inhabited Wilderness,* 1-7.

In order to fill the gap between the published literature on natural history and environmental history, policy analysis and the specific Glacial Lake Atna area, this thesis relies on the work of Cronon, White, and Catton, all of whom have addressed human concepts of nature by examining the modern conservation movement, specifically the U.S. Department of the Interior land management agencies. These historians criticized the policy of creating strict and restrictive wilderness allowances. National Park Rangers, White jests, are almost like an "Environmental Border Agency"—whereby wilderness areas are contained and their borders patrolled.[32] In his article about the tension between environmentalists and those who work for a living, White offers a powerful parable for future wilderness management. It is important—crucial, according to White—for federal lands agencies and environmentalists to be self-reflective in order to avoid alienating those who live and work in nature. Cronon assures readers that the inclusion of human history in wilderness does not call into question the wild-ness of these places. Nor, do they need to be "re-wilded." Instead, we should celebrate the robust ability of nature to sustain when *given the freedom to thrive in the midst of humans*.[33]

Methodology

The scale of time that this thesis investigates—approximately 45 million years—has such breadth that it requires a variety of different methodologies. To organize my analysis, the thesis is divided into three chapters, each of which utilize a different dominant methodology.

Chapter One: Uninhabited Wilderness and the Prehistoric Period addresses the prehistoric Glacial Lake Atna environment. This chapter recounts the prehistory of this wilderness as far

[32] White, "Are You an Environmentalist?" 176-82.
[33] White, "Are You an Environmentalist?" 176-82; Cronon, "The Trouble with Wilderness," 7-9.

back as the geologic record will allow. Through the progression of time, it integrates archeological, ecological, and geologic source materials. This chapter thus utilizes the methodology of archaeological and geologic materials analysis. It analyzes archaeological cultural chronologies and the scholarship of archaeologists to investigate what cultural materials can tell of the human relationship with wilderness. It finally analyzes Native language, through James Kari's Athabaskan language database, in order to map prehistoric features and resources.

Chapter Two: Work and Wilderness and the Frontier Period investigates a time from the frontier period in the mid-eighteenth-century until the early conservation period in Alaska in the mid-1970s. This chapter utilizes more traditional methods of historiography, and analyzes primary source materials through the lens of environmental history. It concludes with an analysis of early conservation land law.

Chapter Three: The Federal Lands Period addresses the period of federal allotment in Alaska (mid-1970s to present). During this period, policy analysis—examination of various lands acts and wilderness laws—dominates. This chapter concludes with an analysis of the legal and political history of the Alaska lands acts and a more traditional approach of federal policy narrative analysis to compare BLM and NPS management and their impaction in the Glacial Lake Atna area.

1. Uninhabited Wilderness and the Prehistoric Period

1.1. Geology

People have been both *working* and *living* along the shoreline of Glacial Lake Atna for upwards of eleven thousand years. While we do not know their names or their birth-places, archaeological evidence indicates that the first people made encampments at the lake's shore, harvested the surrounding organics, and hunted the animals that drank from the lake bed. Archaeological evidence on the Glacial Lake Atna shoreline provides a methodology to study the history of wilderness. Such evidence demonstrates that wilderness may be something far from what the Wilderness Act of 1964 promises; it is not an area "where the earth and its community of life are untrammeled" by man, "where man himself is a visitor who does not remain."[34] For over ten thousand years, humans we would now call indigenous Alaskans migrated through an area now delineated by the federal government as wilderness. The Wilderness Act further charges that wilderness is to generally appear affected "primarily by the forces of nature, with the imprint of man's work substantially unnoticeable."[35] Yet people lived here and worked here, in a place we now call wilderness. This chapter aims to reconstruct the prehistoric Glacial Lake Atna wilderness as it was thousands of years ago by utilizing scientific data. The stories of the first people are best now told through the scientific study of all that physically remains: archaeological artifacts, lithic and pieces of canine bone, petrified flora and faunal remains. I will trace the movement of these peoples from their origins in Siberia into North America, southward, in seasonal rounds, and into the area of Glacial Lake Atna.

[34] Wilderness Act
[35] Ibid.

It is almost impossible to trace the origins of Alaska's terrane, as its history is mostly kinetic: the mountains are endlessly moving as rocks and soils thrust and recoil. The geology of south-central Alaska has an unfathomably long history of movement, some 237-247 million years, and counting. Impelled by millions of years of folding and faulting, the Wrangellia and Alexander off-shore island terrane docked on Alaska at some point in the mid-Cretaceous (66-145 million years ago). The Glacial Lake Atna basin formed, bounded by almost bipolar geologic features. To the north, the Alaska Range of Wrangellia origins—within them ancient corals and bi-valved shellfish from the Permian and Pennsylvanian geologic periods on a long journey northwards from Hawaiian oceans—and to the east, the intrusion of granitic coastal ranges created the steep, volcanic Wrangell Mountains.[36]

At the northeast end of the Aleutian trench, the North American and Pacific Plates subduction zone triggered several geologic reactions. The Alaska Range is part of the American Cordillera. The Wrangellia terrane originated as a volcanic island arc, building up as hard, early elemental basalt, carbonate, and phyllite. Where the Pacific Plate scrapes upwards along the North American Plate, geologic pressure compacted sediments and buckled them into long chains of wiry, uneven peaks. Even at their new resting-place in the sub-arctic, these mountains host a variety of bedrock invertebrate fossils from far away tropical locations, including 248 to 323 million-year-old deepwater trilobites, the youngest species of the genus Griffithides.[37] The geomorphology of the Wrangell Mountains, on the other hand, is Alaskan. A fault-block range formed the Wrangell Mountains at the northernmost end of the Aleutian Trench. As sub-surface

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[36] John R. Williams, "A Working Glacial Chronology for the Western Copper River Basin, Alaska," in *Late Cenozoic History of the Interior Basins of Alaska and the Yukon, Proceedings of a Joint Canadian-American Workshop*, ed. L. David Carter, Tomas D. Hamilton, and John P. Galloway (U.S. Geological Survey Circular 1026, 1989), 81–84.

[37] J.E. Beget et al., "Correlation of the Holocene Jarvis Creek, Tangle Lakes, Cantwell, and Hayes Tephras in South-Central Alaska," *Quaternary Research*, vol. 35 (1991): 174-189.

minerals were buried deep under the earth's crust and placed under immense pressure, volcanic centers overrode pre-Cenozoic base-rocks. Lava erupted from deep within the Wrangell Volcanic Field. Remnants of upper Cenozoic subarea lava and pyroclastic rock cover the surface of the Yukon's Wrangell Mountains. These extrusive rocks lie in flat, undisturbed piles on the Cenozoic surface.[38] They are ancient, but overall of modest relief. The Alaskan Wrangell Mountains are younger geologically speaking, perhaps only five million years old. Affected by a late pulse of Miocene-era tectonism, the Wrangell faulted, contorted, and formed into tight symmetrical rings that stand at over 16,000 feet.[39]

In the low-lands corridor between the Alaska, Chugach, and Wrangell Mountain ranges, Glacial Lake Atna existed in several forms.[40] Even while Wrangellia exhumed its magma supply and built shield volcanoes, caldera complexes, and cinder cones, erosional forces were carving them away. A deep, eroded valley began to form in the area. The upland topography was determined by four significant glacial periods, perhaps most significantly during the Wisconsin Glaciation period indicating perpetual erosion and deposition (75,000-11,000 years ago).[41] Immense glaciers crusted the Wrangell and Alaska Ranges, damming water between their walls. Glacial Lake Atna's earliest formation may date to 60,000 B.P. It formed with glacial dams

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[38] T.L. Pewe and R.D. Reger, "Guidebook to Permafrost and Quaternary Geology along the Richardson and Glenn Highways between Fairbanks and Anchorage, Alaska," *Alaska Division of Geological & Geophysical Surveys Guidebook* 1 (1983): 263.

[39] Gerad M. Smith, "Geoarchaeology of Glacial Lakes Susitna and Atna," *Alaska Journal of Anthropology,* 17, no. 1 & 2 (2019): 6-10.

[40] The earliest direct glaciolacustrine dates suggest that the lake may have begun to form broadly by 40,000 Radiocarbon Years Before Present (RCYBP) and perhaps as early as 60,000 RCYBP; See: Williams, "A Working Glacial Chronology," 81–84. Smith further notes that "radiocarbon dates of this age are difficult to verify and are used here with caution. However, if accurate, the dates may correlate with early Wisconsin sediments corresponding with the retreat of the penultimate period of glaciation;" See: Smith, "Geoarchaeology," 6-10.

[41] John Jangala, "A Preliminary Report of the Gulkana Project: A Random Sample and Evolving Geoarchaeological Probabilistic Survey of the Gulkana National Wild and Scenic River" (Unpublished manuscript, Bureau of Land Management, Glennallen Field Office, Glennallen, AK, 2004), 1-10.

along several river valleys, including Mentasta Pass, the Susitna River, Isabel Pass and the Copper River. Glacial advance further deposited till over earlier lacustrine silt as the ice advanced into a lake-filled basin. Glaciers continued progressing north and south from the Alaska Range and east from the Chugach, forming an ice cap in the basin center. The subsequent retreats may have begun in the south, at the northern margins of the Chugach Mountains, regressing-toward the central basin area. The lake formed at the periphery of this ice cap resulting in moraine stabilization near or on the northern foothills of the Alaska Range.[42]

[42] Glacial Lake Atna was preceded by larger Lake Susitna, approximately 100 thousands years ago. Lake Susitna and Glacial Lake Atna (also referred to as Glacial Lake Ahtna or Ancient Lake Atna), may have possibly been conjoined to form a single lake at some point around 21,730 B.P.; See: Smith, "Geoarchaeology," 6-10.

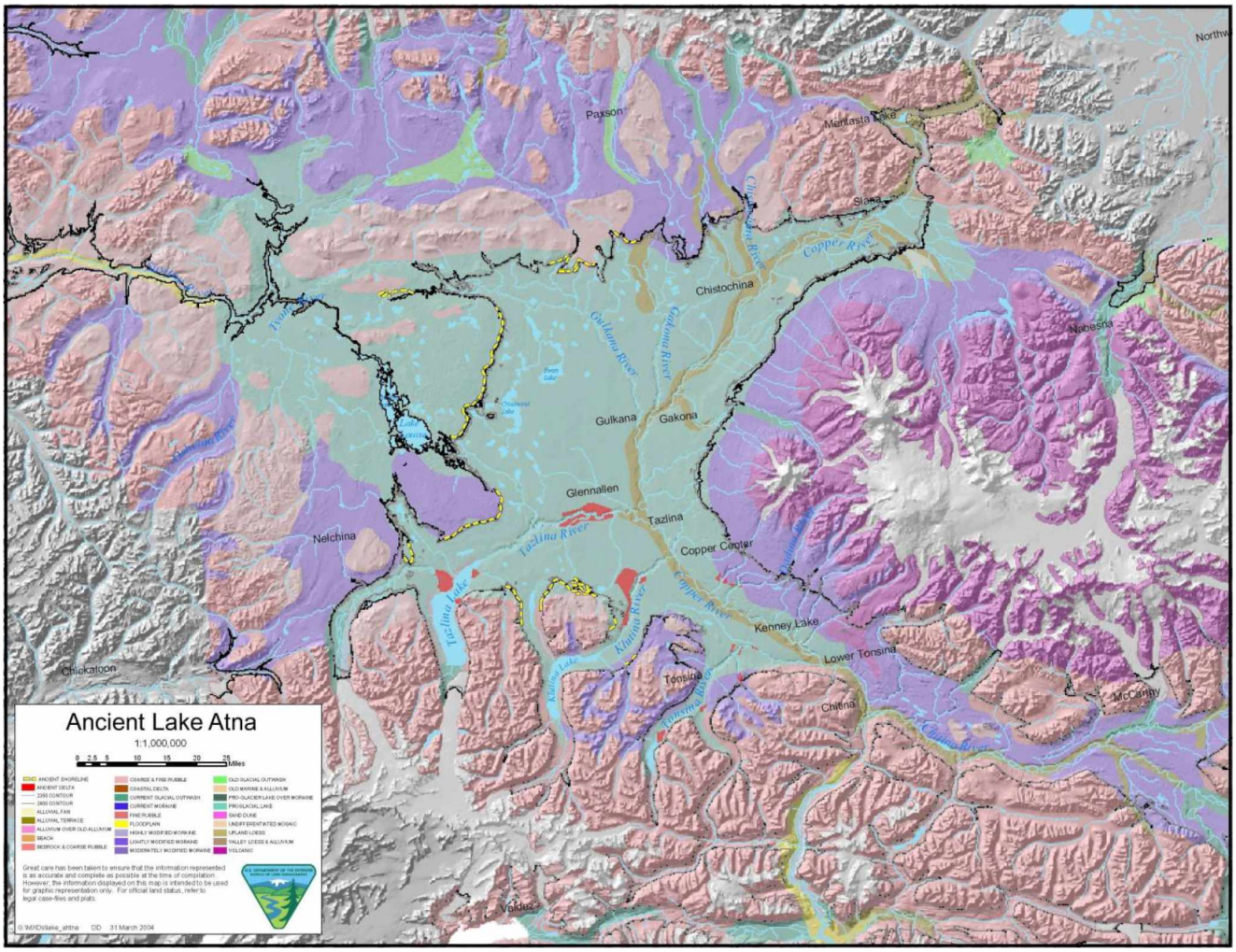

Figure 1.1 "Ancient Lake Atna" Map:
Map of the prehistoric margins of "Ancient Lake Atna," also known as Glacial Lake Atna.[43]

The late Wisconsin glacial brought on regional glacial stagnations, retreats, and re-advances. Lacustrine deposits associated with deglaciation suggest that water levels rose throughout the Alaska and Wrangell Mountain basin. The ice-free areas of the Susitna and Copper River basins merged. During this time, an early waterbody known as Lake Susitna swelled to its highest elevation near 975 m. Ice recession eventually caused the lake to burst,

[43] U.S. Department of the Interior, National Park Service.

pouring glacial water down the Matanuska Valley and lowering lake levels to below 914 m around 21,730 B.P. However, the water quickly reaccumulated. The next and most recent glacial advance began in the region roughly at the same period ~21,000 years ago, or more broadly between 24,000 and 11,500 RadioCarbon Years, B.P. Lake Susitna's levels again began to increase, merging with and overtaking a small, regional Lake Atna and settled between 92 and 777 m as demarcated by broad outwash kames (Figure 1.1). Throughout the following millennia, Glacial Lake Atna burst its glacial dams time and time again.[44] Geologists note extensive late Pleistocene glaciolacustrine and glaciofluvial deposits in the Susitna Valley.

The most recent glacial advances, collectively termed the Denali Glaciations, covered the lakebed in polar ice. Glacial rise and retreat created morainal deposits into U-Shaped valleys. Broad outwash and lateral stream erosion contributed to the morainal landscape. Moraines are poorly sorted, e.g. boulders tradition into slits quickly without depositional context. Morainal deposits are are unlike broad outwash and stream erosion deposits of each that form well sorted bedded silts, bedded sands, bedded gravels, and rocks. Shifting ice in the Broxson Gulch stream, northward, caused deglaciation. Present ice masses caused isostatic depression, and left widespread ice stagnation.[45] The lowland topography hosts dozens of small lakes, unnamed kettle ponds, and poorly drained tundra.[46] Glacial Lake Atna persisted until about 10,500 R.C. years B.P; and ancient Tangle Lake to as late as 3,600 R.C. years B.P until its final outburst, which flooded the waters of the northern Delta and Tanana Rivers.[47]

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[44] Williams, "A Working Glacial Chronology," 81–84.
[45] Pewe and Reger, "Guidebook to Permafrost," 263.
[46] Richard VanderHoek et al., "Ice Patch Research and Monitoring in the Denali Highway Region, Central Alaska, 2003- 2005," *Alaska Journal of Anthropology* 5(2) (2007): 185-200.
[47] Grant T. Shimer, "Holocene Vegetation and Climate Change at Canyon Lake, Copper River Basin, Alaska" (MA thesis, University of Alaska, Fairbanks, 2009), 4.

Where Lake Atna once lay, there was now a deep basin enclosed on all sides by upland topographic features over 3,000 feet above sea level. Swept gravel and earth ground the mountain slopes and formed extensive sweeping esker ridgelines. Loose gravels and silts were hauled away by hydraulics arms to 1,500 – 2,000 feet above sea level, defining the western drainage systems that persist today.[48] Slowly, life began to take hold on the post-glacial lakebed. The new terrain was abundant in emergent aquatic vegetation; the seeds and spores of plants (Nuphar, Potamogeton, Nitella), green mosses, and freshwater bryozoans (Cristatella mucedo, Plumatella sp.) flourished in the freshwater streams.[49] A discontinuous strandline of rocks and sand circumnavigating esker ridges present the only evidence of postglacial Lake Atna, visible to the naked eye at an elevation of about 2,900 feet above sea level.[50] Were it not for a cover of thousands and thousands of large cobbled rocks, polished smooth by the waves on Lake Atna's shore, and in other places sandy beaches, its 50,000-year existence would be nearly unobservable on the tundra. The cobbled hillsides, while overgrown today, are littered with various kinds of gravels, sands, and smaller rock.

1.2. Archaeology

To most people, rocks are just rocks: solid, unyielding *facts* that slump on the earth's surface unnoticed and insignificant.[51] Many of the early archaeologists in south-central Alaska (Frederick West, Peter Bowers, James W. Dixon, Richard VanderHoek, K. M. Campbell, and the others on whose work this chapter relies), regarded rocks as infinitely more significant. In the

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[48] Beget et al., "Correlation of the Holocene Jarvis Creek," 174-189; Williams, "A Working Glacial Chronology," 81.
[49] Smith, "Geoarchaeology," 13.
[50] Frederick West, "Dating the Denali Complex," *Arctic Anthropology,* no. 12 (1975): 76-81.
[51] Thomas Andrews, *Killing for Coal: America's Deadliest Labor War* (Cambridge: Harvard University Press, 2010) 18.

early 1960s, archaeologists flocked to the Last Frontier as young men, wiry, clad in Xtra-Tuffs, and L.L Bean, eager to get their hands dirty and fascinated with the deep history of the state. From outcroppings of metamorphosed sedimentary rock, mantles of glacial deposits containing basalts and meta-sedimentary cobbles, quarries of argillite, rhyolite, obsidians, and cherts, rocks that to the untrained eye look indistinguishable, pretty yet insignificant, archaeologists deciphered a deep history. From geological investigations, the prehistoric image of Glacial Lake Atna began to take shape. It was deep; it was vast and it covered nearly the entire interior lowlands in glacial ice; and intriguingly, its shoreline was littered with archaeological remains attesting to thousands of years of human occupation.[52]

Quite a lot of archaeology lies right on the surface, deposited on Lake Atna's well-sorted gravels.[53] Archaeologists quickly gathered surface-finds, photographed them, and attributed them to a cultural chronology. "We know that an early notched point horizon was widespread here," wrote archaeologist Charles Holmes of the Northern Archaic period on the Lake Atna shore.[54] Archaeologists measured artifacts based on their attribution to archaeological concepts that require that there be continuity of shared cultural traits. Holmes' finds, for example, correspond to a 3,500 - 5,000 B.P period. His surface discoveries tell a complex story. Through categorization and re-categorization, archaeologists proverbially lined up these ancient rocks in chronological order. *Which is eldest?* — the thought reverberated through the walls at the University of Alaska Museum of the North. Categorization of these prehistoric artifacts "nagged" at the young archaeologists.[55]

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[52] Jangala, "A Preliminary Report of the Gulkana Project," 17-20.
[53] Jangala, "A Preliminary Report of the Gulkana Project," 17-20.
[54] Charles E. Holmes, "The Taiga Period: Holocene Archaeology of the Northern Boreal Forest, Alaska," *Alaska Journal of Anthropology* vol. 6, no. 1 & 2 (2008): 69.
[55] Holmes, "The Taiga Period," 69-72.

Other early excavations of a few sites surrounding the Glacial Lake Atna shore (Swan Lake, Tangle Lakes, Onion Portage, sites named by the crews of young men and women attacking them with trowels and screens), exposed sub-surface archaeological troves. On the earth's surface, they sawed back moss and duff, a damp layer of decomposing leaves and roots, to reveal a spectrum of mineral soils. The general stratigraphy consists of a series of banded sands, silty sands, and fine sub-angular gravels and loess. Deeper, researchers exhumed the volcanic tephra layer, a thin, ashy, light-brown stratigraphic marker, also called the Hayes Tephra and the Cantwell Ash, and dated it to between 3,500 to 3,800 B.P.[56] During excavation, archaeologists dug up mottled clay horizons, littered with the shards of lithic tools and calcine animal bones. Spruce and poplar pollens entered the pollen record around 9,100 R.C. years B.P; these layers, peppered with charcoal, provided carbon for dating. Excavation units frequently bottomed-out when they reached graveled soils overlaying decomposing granite, large cobbles, or bedrock. Finally, artifacts were removed from excavation units to be cleaned and studied.[57]

Each archaeologist, of the mid-1970s wave, rushed to publish the definitive cultural chronology of central Alaska. Archaeological evidence suggested human occupation in the Glacial Lake Atna area by at least 10,600 B.P.[58] Archaeologist Fredrick West, in 1975, initiated an outline of the cultural chronology of the Tangle Lakes area detailing human travel to the waterbodies between the Alaska Range and the Wrangell block.[59] Peter Bowers, in 1979, postulated a chronology that ties the Beringian tradition to various Eurasian traditions.[60] Various

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[56] Peter Bowers, "The Cantwell Ash Bed, a Holocene Tephra in the Central Alaska Range," *Alaska Division of Geologic and Geophysical Surveys*, Geologic Report, no. 61 (1979): 19-24.
[57] Frederick West, *American Beginnings: The Prehistory and Paleoecology of Beringia* (Chicago: University of Chicago Press, 1996), 1-7.
[58] E. James Dixon, "Cultural Chronology of Central Alaska," *Arctic Anthropology,* 22, no. 1 (1985): 47-49.
[59] West, "Dating the Denali Complex," 80.
[60] Bowers, "The Cantwell Ash Bed," 19-24.

interpretations take into account the minute differences between assemblages, each archaeologist's work building on that of his peers. E. James Dixon, in 1985, provided the chronology that has been most frequently used to describe the six major cultural complexes in the interior of Alaska.[61] It is as follows:

- Present - 100 B.P—Euro-American Tradition—Identified by modern items.
- 100 - 1,500 B.P—Athapaskan Tradition—Identified by increased use of organic materials and copper, reduced use of lithic technology.
- 1,500 - 3,500 B.P—Late Denali Complex—Identified by core and microblade assemblages and lanceolate projectile points.
- 3,500 - 5,000 B.P—Northern Archaic Tradition—Identified by side-notched projectile points and the absence of micro blades.
- 8,200 - 10,600 B.P—Denali Complex (also known as American Paleoarctic)—Identified by core and microblade assemblages.
- 10,600 - 11,000+ B.P—Chindadn Complex—Identified by triangular and tear-drop shaped bifacial projectile points. Microblades absent.[62]

Since Dixon's publication in 1985, following the mad-dash of archaeological work in the 1970s, it is generally accepted that the earliest cultural sites in the Copper River area and Tanana River Valley in Alaska date as far back as 11,000 B.P.[63] The transitional period begins at the Younger Dryas climatic interval, ca. 13,000 B.P. The general warming period in the Holocene Thermal Maximum spiked global temperatures, and as Gerad Smith explains, "though muted in Alaska, this signal correlated with a drop in effective moisture" and the principle deglaciation of the Alaska and Wrangell Range between 12,000 and 11,3000 calibrated years B.P.[64] Also called the Northern Paleo-Indian tradition, the Nenana Complex, or the Northern Cordilleran tradition,

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[61] Although Cook and McKennan (1970) defined the Athapaskan tradition as beginning as early as 2,500 B.C, other archaeologists (Dixon 1985; Holmes 1979) have restricted it to the past fifteen hundred years before the historical period. Bacon (1987) published a critical discussion of cultural chronology for central Alaska; See: G.H. Bacon, "A Cultural Chronology for Central Interior Alaska: A Critical Appraisal," *The Quarterly Review of Archaeology,* (June 1987): 3-5.

[62] Dixon, "Cultural Chronology," 47-50, 66.

[63] Dixon, "Cultural Chronology," 47- 50, 66.

[64] Smith, "Geoarchaeology," 16.

these sites are indicative of humans related to the "fluted point" cultures of Clovis, Folsom, Plano, and Agate Basin that flourished south of the North American ice sheets. The people living within Alaska came into contact with other North American populations along a narrow interior ice-free corridor. Artifact assemblages indicate the apparent dispersal of these lithic technologies throughout North America with no Siberian antecedent. The earliest archaeological sites in the northern Tanana River Valley currently cluster ~2000 years after the earliest published hypothesized date near which Glacial Lake Atna drained and ~3000 years before the latest potential lake drainage event.[65]

The American Paleo arctic tradition or Denali complex (about 8,200 - 10,600 B.P.) is identifiable by core and microblade assemblages, including lanceolate and side-notched projectile points. Bowers established in 1987 that more than twenty sites from the Denali Complex (dating between 7,700 B.P and 10,500 B.P) could be associated with the more widespread Beringian tradition related to cultural complexes in eastern Siberia such as the Diuktai culture. Various archaeologists since have concurred regarding Denali Complex antecedents.[66] During this time, ocean levels advances and to close the land bridge across the Bering Strait. Tangle Lakes sites are technologically similar, and while the sites are primarily superficial surface scatters, together they suggest early Holocene occupation associated with the shores of an old Tangle Lake. Archaeologists investigated Greater Tangle Lake; intrigued by the unique lake drainage-processes, they inferred that morainal topography encircled Greater Tangle

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[65] J. R. Erland et al.,"Two Early Sites of Eastern Beringia: Context and Chronology in Alaskan Interior Archaeology," *Radiocarbon* 33 (1991): 35-38; Charles E. Holmes, "Tanana River Valley Archaeology Circa 14,000 to 900 B.P," *Arctic Anthropology,* 38, no. 2 (2001): 154-160.

[66] Peter M. Bowers, "Known Sites in the Tangle Lakes Archaeological District," in *Cultural Resources Management Plan for the Tangle Lakes Archeological District*, Draft. Appendix A, (1987): 4-7. tDAR id:114828; Erland et al.,"Eastern Beringia," 35-38; Holmes, "Tanana River Valley Archaeology," 154-160; Charles E. Schweger, "Chronology of Late Glacial Events from the Tangle Lakes, Alaska Range, Alaska" in *Arctic Anthropology* 18 (1981): 97-101; West, *American Beginnings,* 40-45.

Lake for roughly 2500 years until it "catastrophically burst" sometime ~8544 - 8785 calibrated years B.P (7860+110 RCB.P).[67] West has further suggested that ancient peoples abandoned the area around the Tangle Lakes, or northern Lake Atna shore, around 7,000 to 6,000 B.P.[68] This break in occupation is noticeable in the disappearance of regional archaeology and may have persisted until people using Northern Archaic technology migrated into the area in the mid-Holocene.[69] Environmental factors may have caused the departure. Janagala, in 2004, noted that while Dixon's chronology is widely accepted, various archaeologists in Alaska have brought forth some debate regarding Dixon's accuracy. G.H. Bacon objected to Dixon's chronology for Central Alaska in 1987 noting that "some of the artifact assemblages from the 'type' sites" used to illustrate the Late Denali Complex and the Northern Archaic Tradition are "only distinguishable by associated stratigraphy;" Bacon also suggests that Dixon's Interior chronology is "latitudinous" and may perhaps neglect several small-scale regional chronologies.[70] However, more recent archaeological work suggests that while there are no stratified sites that contain intact datable materials to firmly secure this complex aside from the recent work as site XMH-111, people likely would have continued to live in the area utilizing convenient resources.

About 5,000 B.P, and spanning approximately 1,500 years, the northern Archaic tradition is apparent in boreal forests in South-central and Interior Alaska.[71] The term "Taiga period" was proposed more than a decade ago to refer to Holocene archaeological materials of the northern

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[67] Campbell's thesis referenced later dates and argues that the dates put forward by West may be unfounded. Further, Upper Tangle Lake and Canyon Lake exist modernly in the area which used to hold Greater Tangle Lake; See: Smith, "Geoarchaeology," 18.
[68] West, "Dating the Denali Complex," 80.
[69] West, *American Beginnings,* 380.
[70] Bacon, "A Cultural Chronology for Central Interior Alaska," 3-5; See also: Jangala, "A Preliminary Report of the Gulkana Project," 17-20.
[71] Holmes, "The Taiga Period," 78-79.

boreal forest. There remains a strong correlation between the northern Archaic and the boreal forest. To better organize the periods of cultural chronology within the broad northern Archaic, archaeologists have tended to rely on specific artifact traits for dating and cultural classification. "It is striking to find the early appearance of notched point sites over such a wide geographic range," writes Holmes.[72] "Between 4000 and 3000 BC notched point forms are found not only at Onion Portage," but also in the Noatak drainage (recorded by Anderson in 1972), at Ugashik Lake (Henn, 1978), in the Upper Susitna basin area (Dixon, 1985 and Betts, 1987), and the Tangle Lakes area (McGhee, 1971 and West, 1975).[73] Notched points comprise an essential aspect of the northern Archaic toolkit, and their prevalence would suggest that the dispersal of tool-technology was more widespread than initially thought throughout the Glacial Lake Atna area. However, Holmes notes that a clear chronological framework has long eluded archaeologists due to the absence of stratified sites representing a continuous inhabitation during the late Pleistocene through the Holocene.[74]

Researchers have learned much about prehistoric ways of life from archaeological remains. Flint-knappers and hafters left behind clues on the artifacts they made. The locations where humans made tools, where they sharpened them, and where they tossed them aside, have created a bread-crumb trail in the archaeological record indicating their migratory rounds. The archaeology testifies that people "were probing the very edges of their ecosystems," notes archaeologist Gerad Smith; mountainous ice sheets, lakes, and glaciers "should be considered not as natural barriers" to human movement "but rather as unique ecological challenges to mobility

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[72] Ibid.

[73] Holmes, "The Taiga Period," 78-79; Smith, "Geoarchaeology," 16.

[74] The "hunting technology of the Northern Archaic tradition may have more to do with various lanceolate projectile systems than with notched points," as well as other aspects of the toolkit, such as burins, micro blades and scrapers, and the overall culture; See: Holmes, "The Taiga Period," 75.

that humans faced and overcame" as soon as they ventured into the interior areas.[75] If we assume that our current archaeological data set reflects an accurate sample of the past, it would appear that humans traveled unbounded around the lakeshore. Humans existed in tandem with Glacial Lake Atna upwards of ~3000 years before the latest potential disappearance of the lake. There is a long history of human inhabitation in the areas surrounding Glacial Lake Atna.

1.3. The First Peoples and Work

The archaeological record does not indicate precisely how or when the first humans made their way to the shores on Glacial Lake Atna. The story, in its best postulation, may have taken place upwards of 11,000 years ago. Humans may have migrated into this area employing a southern corridor east of the Wrangell Range. Ahead, the glacial-topped peaks of the eastern Alaska Range towered over various esker formations that banked Glacial Lake Atna, much as they stand now. Migratory groups trooped past the Wrangell Mountain territory and familiarized themselves with the crags and ice formations that loom over the eastern horizon. The Kelt'aini, or *The Ones that Control the Weather,* as the Atna Athabascan name suggests, consist of the three bulbous clouded and glaciered, volcanic peaks, the tallest of which we call Mt. Wrangell is over 16,000 feet above sea level.[76] In warm summer months, cold weather storms blew down from their foothills, controlling weather patterns. At its most considerable extent, Glacial Lake Atna stretched ahead for hundreds of miles, its shore crusted in ice and the deep recesses of its

[75] Smith, "Geoarchaeology," 15.
[76] "The K'elt'aeni," National Park Service History, ELibrary, accessed January 2020, http://www.npshistory.com/publications/wrst/newspaper/2014.pdf.

depths coloring it a deep blue.[77] The first persons to reach Glacial Lake Atna were likely carrying with them just a few items and picking their way northwards among sedges, berry-bearing shrubs, and dwarf poplar. The well-packed game trails of moss overlay gravel trails similar to those that weave their way around the well-drained ridges on the Lake Atna shoreline today.

By about 10,000 B.P, small groves of aspen took hold in the south-facing slopes. Alder and black and white spruce also would have been consistent in the area. Sometime before 11,800 B.P, vegetation around the lakes was dominated by birch, lichen, and sedges. Underfoot, the alpine tundra contained flowering plants, grasses, moss, and lichen. Cranberry, blueberry, and kinnikinnik low growth bushes, as well as Labrador tea, lupine, arnica alpine, and coltsfoot, and the wild Alaskan rose grew in lowland areas. Spruce and poplar pollens entered the pollen record around 9,100 RadioCarbon years B.P. Much later after Glacial Lake Atna drained, thin trees grew on the South Tangle Lake, as evidenced by wood fragments.[78] Greater Tangle Lake persisted in a stable state, blocked by moraines for roughly 2,500 years, and excavations have unearthed beaver-gnawed pieces of wood, suggesting that the lakeshore was ecologically healthy.[79] The Holocene-era ecosystem flourished. Ancient pollen samples tell us that a

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[77] Glacial evidence indicates that Glacial Lake Ahtna was perhaps upwards of 2,000 feet deep at its center. Its depth and the formations of many glacial dams would likely have resulted in a near-freezing temperature and probable year-round glacial-blue ice; See: Pewe and Reger, "Guidebook to Permafrost," 263; Schweger, "Chronology of Late Glacial Events," 97-101.

[78] Trees are evident in the Tangle Lakes area as early as 11,281– 12,159 cal RCYBP(10,150 ± 280); See: West, *American Beginnings,* 40-45.

[79] A sample of beaver-gnawed piece of wood was taken from the lower Dadina River at an elevation of 550-600 meters for further testing; See: Smith, "Geoarchaeology," 6-10.
Further, although there is no direct prehistoric evidence of large mammals/ ungulates in the local area, pollen evidence suggests that the post-deglaciation vegetation may have supported ungulates. The first large mammal that would be adaptable to a birch, sedge, and lichen diet would have been caribou; See: VanderHoek et al., "Ice Patch Research and Monitoring," 185-200.

monstrous boreal forest, strikingly similar to that of today, was present in lowland areas since the early period of lake formation and throughout the glacial expansion.[80]

A few thousand years after the first humans made their way to Glacial Lake Atna's shore, another man was born about 200 miles eastwards in another silty, sub-arctic river valley. Kwäday Dän Ts'ìnchi, or *Long Ago Person Found*, was born c. 1450-1700 AD in modern-day British Columbia and was nearly twenty at the time of his death near the Tatshenshini-Alsek River. Like many of the mobile people in Alaska, he was born on the coast of the Pacific Ocean and followed the weather inland, carrying with him just a few items. Among them, a wood-framed backpack of beaver fur containing a mass of lichen, mosses, and leaves, gaff poles for walking, sticks speared with salmon strips, a curved, hooked stick possibly used for setting marmot snares, an iron-bodied knife with matching gopher skin sheath, and an atlatl and dart. On his body, he wore a robe made from nearly one hundred pelts of the ground squirrel subspecies *Spermophilus parryii plesius,* sewn together with sinew and a woven Tlingit *zauk-kaht* root hat of split spruce roots.[81]

While Kwäday Dän Ts'ìnchi likely never traveled to the area of Glacial Lake Atna, another person much like Kwäday Dän Ts'ìnchi and perhaps born on the coast in Prince William Sound did make his way to Glacial Lake Atna. This imagined character is a compilation of many genuine people who lived their lives on Glacial Lake Atna's shores and traveled great distances

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[80] Smith, "Geoarchaeology," 6-10.

[81] Analysis of Kwäday Dän Ts'ìnchi's tissue indicates a long-term diet consisted principally of shellfish and salmon, suggesting that he was originally from one of the communities near the Pacific Ocean coast. His stomach contents at the time of death included beach asparagus, and he was carrying salmon and shellfish with him, indicating he was traveling from the coast. Based on pollen found in the contents of his colon, he was traveling in the summer. Hair samples showed that his diet over a couple of months, however, had been more strongly meat-based than usual, suggesting that he had spent some time inland; See: Sheila Greer, Richard J. Hebda, and Alexander P. Mackie, "Teachings From Long Ago Person Found: Highlights from the Kwädąy Dän Ts'inchį Project," Royal BC Museum; Issue 2 (January 2012): 1.

within regional bands. The indigenous Athabaskan people were highly transitory. Like Kwäday Dän Ts'ìnch, they may have moved across mountain passes, their bellies full of beach asparagus and shellfish from the coastal regions, in search of game in the higher elevations.[82] The archaeology suggests that people actively avoided using the lowland landscape of the Copper River until the late Holocene, preferring the uplands throughout the middle Holocene (when Lake Atna filled with lowlands with water). Two lakes, known as *Ten 'Aax Bene'* and *Ubaaghe Daxaelts'ez'aan Bene',* now exist in the lake-bed of Ancient Tangle Lake to the south of Upper Tangle Lake. The lake names translate to "it's shore we come up with pack lake," in the Ahtna Athabaskan language.[83] Similarly, Kwäday Dän Ts'ìnchi reached the Tatshenshini-Alsek River with a pack atop his back, filled with foreign barks and wood fragments. Along Lead Caribou Ridge, in the Tangle Lakes, an eroding hearth provided National Park Service researchers with a radiocarbon date of 4,530 to 4,430 Cal yrs. B.P. It contained a birch fragment and broken, calcined mammal bone. One wood fragment has been identified as either fir or pine, Abies or Pinus, but not spruce native to the area, suggesting that people in this area also packed in far-off fuels from the coast.[84]

Definitively within the mid-Holocene, short-term, temporary encampments cropped up throughout the Glacial Lake Atna valley. From the Wrangell Mountain foothills to the northern shore of Lake Atna, humans were migrating for tool trade and harvesting tool quality rock. Humans expanded their migrational range in part to better their toolkits. While tools made from wood and other organics were convenient, stone tool manufacture yields more durable and effective weaponry. At this time, an exposed mantle of glacial deposits containing argillite and

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[82] Ibid.
[83] James Kari, "Ahtna Place Names Database," (Database maintained by Bureau of Land Management and Ahtna Incorporated, 2005), 156-159.
[84] Jangala, "A Preliminary Report of the Gulkana Project," 17-20.

other meta-sedimentary cobbles was contiguous throughout the Tangle Lakes, yielding material for stone tool manufacture. Northward, archaeologists located obsidian source quarries at the Landmark Gap Quarry and east of the Delta River and southeast of Sugarloaf Mountain.[85] Smith notes that archaeologist Ben Potter observed that long-distance travel for trade in obsidian was "initially inferred from an unknown source likely located in the Yukon-Tanana Uplands [known as GroupH] and later during the terminal Pleistocene" from a quarry source known as "WikiPeak."[86] The WikiPeak source lies deep within the southeastern portion of the Nutzotin Mountains less than sixty miles from the Wrangell Mountains terminus. This obsidian source is widespread, found at archaeological sites from Broken Mammoth, in the middle of the Tanana Valley, to Moose Creek, a Nenana complex occupation, far to the north in Alaska's interior.[87]

Bow-and-arrow technology appears among interior cultures around 1,000 B.C, long after the first humans settled in the Glacial Lake Atna area, close to the juncture of the Middle and Late Taiga periods of the northern Archaic.[88] Holmes points out that the northern Archaic tradition did not develop in isolation. Non–northern Archaic groups throughout the boreal forest and Glacial Lake Atna border areas likely contributed to the changing technological processes by continuous interactions.[89] A sudden but widespread appearance of notched-pointed lithic technology suggests that people moved through large swaths of land, certainly around the Glacial Lake Atna shoreline. Grasping the bearing surface, humans were able to store energy during the throw (the atlatl was an extension of the arm) and launch a halfted foreshaft at a higher velocity.

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[85] VanderHoek et al., "Ice Patch Research and Monitoring," 185-200; West, *American Beginnings,* 50.
[86] Smith, "Geoarchaeology," 15.
[87] Ibid.
[88] Holmes, "The Taiga Period," 69.
[89] Changing technological processes are exemplified by new tool traditions such as the Arctic Small Tool tradition; See: Holmes, "The Taiga Period," 71.

A few recent projectile artifacts have emerged from ice patch archaeological investigation in the Yukon Territory and Alaska.[90]

Although ice-patch research is still in its formative stage, National Park Service archaeologists have recently made many larger-scale efforts to study these areas. Ice patches are high elevation swaths of glaciered year-round ice. Archaeologists can to recover remarkable organic material from their melting perimeters. Such well-preserved artifacts are scarce elsewhere, as exposure has long since decomposed organic artifacts on the soil surface. Archaeologists have found both notched points and lanceolate points hafted into fore-shafts and in close porosity to organic materials, which may indicate atlatl dart shafts. In some south-central locales, note VanderHoek et al. in *Ice Patch Archaeology in Alaska*, people hunted animals on these small stable snowfields and left tools behind in the surface snow.[91] Ice patch archaeology is usually associated with hunting technology, as caribou and other mammals frequently use ice patches to gain respite from heat insects, and thus prehistoric people relied on ice patches to locate their prey at close range.[92] Depositional context indicates that people used snowfields to traverse alpine passes and either lost lithic materials there, discarded these objects, or perhaps even perished on their hunts. The silhouette of a lanceolate point, dated to ~800 B.C, from the Wrangell Mountains, was found to be strikingly similar to a point found in an Alaska Range ice patch in 2003 by E. James Dixon et al. suggesting that humans were sharing lithic technology around Glacial Lake Atna's shoreline.[93] The striking similarity in lithic technology between the

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[90] E. James Dixon, Craig M. Lee, and William F. Manley, "The Emerging Archaeology of Glaciers and Ice Patches: Examples from Alaska's Wrangell-St. Elias National Park and Preserve," *American Antiquity,* 7, no. 1 (January 2005): 129-143.

[91] Richard VanderHoek, E. James Dixon, Nicholas L. Jarman, and Randolph M. Tedor, "Ice Patch Archaeology in Alaska: 2000-10," *Arctic,* vol. 65, supplement 1: The Archaeology and Paleoecology of Alpine Ice Patches (2012): 153-164.

[92] Ibid.

[93] Dixon, Lee, and Manley, "The Emerging Archaeology of Glaciers and Ice Patches," 129-131.

Wrangell-area lanceolate point, found in an area on the eastern shore of Glacial Lake Atna, and that found in the Alaska Range, on the northernmost extent of the lake, indicates that humans were traveling north-south around Glacial Lake Atna.

As Smith observed, the first humans in the Lake Atna area were probing the edges of their ecosystem. The first peoples adapted migratory, season-dependent, and subsistence-oriented life-ways. Archaeological remains of short-term, task-specific campsites suggest mobile land use. As indicated by lithic technology, the people who lived in this valley skirted the periphery of the Copper Bain in a north-south oriented crescent-moon shape around the Wrangell Mountains and northward into the Tangle Lakes.[94] The Ahtna people, a definitive cultural development achieved by at least 1,500 B.P, lived in four sub-regions: Lower Copper River, Central region, Upper Copper River, and Western region. Glacial Lake Atna once existed in the borderland between the Western and Central Ahtna (spelled according to James Kari's cultural Ahtna Place-Name Database) and was regionally inhabited by the Gulkana-Gakona Band and the Tyone-Mendeltna band.[95]

To access more distant areas, a network of foot trails connected the Ahtna people across the Copper River Basin, perhaps as distant as the White Mountains well to the north and the oceans of South-East Alaska to the south.[96] People perhaps entered the central valley seasonally and retreated north to residential camps in the Tanana Valley, visiting the distant Nenana, Delta, Susitna, and Copper River headwater areas as part of a planned annual strategy.[97] A regular,

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[94] Holly Reckord, *Where Raven Stood: Cultural Resources of the Ahtna Region* (Fairbanks, Alaska: University of Alaska, Fairbanks, 1983), 76-80.
[95] Frederica de Laguna and C. McClellan, "Ahtna," in *Handbook of North American Indians*, vol. 6, ed. J. Helm (Washington, D.C: Smithsonian Institution, 1981), 641–664.
[96] John C. Blong, "Prehistoric Landscape use in the Central Alaska Range," (Ph.D. diss., Texas A&M University, May 2016), ii; Kari, "Ahtna Place Names Database," 156-159; West, *American Beginnings,* 40-45.
[97] Blong, "Prehistoric Landscape Use," ii.

summer inter-tribal trade fair between the Ahtna and the Tanana people was historically reported near Isabel Pass.[98] The more extensive regional trail network was oriented to foot travel without the widespread use of boats and is likely to have evolved over several thousand years. These routes usually followed natural corridors such as river valleys and traversed mountain passes.[99] Migratory gourds marked trail systems at intervals, indicating how many people were traveling along the trail as well as their stopping points and destinations; field-researchers dated one of these painted tree blazes near the Tok River to over 122 years old.[100] As time passed, Alaska Natives developed more intricate trade networks and migrational routes, and explored even the most remote depths of the area. Where mountains might have seemed unsurmountable, or glaciers unpassable, the Ahtna people trekked upwards and inwards, frequently naming remote landmarks and far-off peaks.[101] Such travels indicate a laborious lifestyle, one characterized by work.

The archaeological record of Glacial Lake Atna complicates the idea of wilderness as a place that contains no work. Inherently, hunting, fishing, and seasonal lifestyles require a vast amount of work. Work can be counted in energetic expenditure, the count of calories spent on each task. Acts such as laboring, moving, hiking, and hunting are forms of work. Indeed, the lack of permanent or longer-term occupational sites in the southern foothills of the Alaska Range suggests that people used a mobile residential strategy, with groups moving about the landscape using a non-centralized system in order to follow resources.[102] Simply, to paraphrase the environmental historian Richard White, there is no separating work and nature. Work has

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[98] Reckord, *Where Raven Stood*, 76.
[99] Kari, "Ahtna Place Names Database," 150.
[100] Kari, "Ahtna Place Names Database," 156-159; Jangala, "A Preliminary Report of the Gulkana Project," 17-20.
[101] Ibid.
[102] Blong, "Prehistoric Landscape Use," 5.

integrated humans so thoroughly with the environment that the two can never disentwine. "Humans have known nature by digging in the earth," writes White.[103] They have known nature by building homes into the ground surface, and creating shelter from sod and wood and animal skins. They know each plant and its properties and its taste, which routes are most natural to traverse, which seasons are most hungry; they know work.

The Ahtna followed seasonal migration patterns based on animal migrations and the local fauna availability. The Tangle Lakes are the headwaters of the Gulkana River, which has played an essential role for the Ahtna people as a travel route in winter and for its fish resources in early summer. Three forks of the Gulkana River flow through the upland spruce-dominated forest. The close association of Denali Complex sites and the Glacial Lake Atna lakeshores suggests that non-winter seasonal lake resources may have been the primary reason for human occupation in the area.[104] Generally, Holocene mesic shrub tundra communities existed in abundance around the shoreline.[105] Small, fissured groups harvested fish, game, roots, vegetables, and berries (blueberry, raspberry, rose hips, Labrador tea) in high quantity in spring, summer and fall; they processed and transported/ stored resources in caches for winter use.

Where the Middle Fork drains into the Gulkana, changing seasonal resources brought people to the southern corridor by mid-summer.[106] The Middle Fork of the Gulkana River hosted anadromous species such as steelhead trout, sockeye, and chinook salmon. *Bentsina'* is the name for the Middle Fork of the Gulkana River, a traditional fish spawning area. To the south and west, Mud Lake is referred to as *Xay Luugge' Bene'* and noted in the Ahtna place names corpus

[103] White, "Are You an Environmentalist?" 176.
[104] Smith, "Geoarchaeology," 17.
[105] Dixon, "Cultural Chronology," 47-66.
[106] Reckord, *Where Raven Stood*, 70.

as a coho salmon lake. Fish camps were located near the winter villages and sources of salmon and other fish; they tended to be composed of temporary structures distinct from those of the winter villages.[107]

Regional bands typically convened in the fall for group-hunts. People harvested animals throughout the year, when migration or their congregating in large numbers made them more easily accessible. An abundance of paleontological wapiti or caribou remains lie in the upper Susitna, as evident in the archaeological record; these animals would have relied on a diet of primarily low-growing sedges and lichen.[108] The Ahtna made their hunting camps at higher elevations and upland from their winter camps. On the other hand, the Ahtna made their permanent winter villages near the Copper River tributaries and near lakeshores.[109] Modern Middle Tangle Lake, *K'ay' Giis Dat'ann Bene'*, translates to "willow sprout is-in-position lake," possibly referring an ungulate-ambush area where people constructed narrowing fences were constructed out of willow branches. Other important species to the prehistoric diet included moose, bear, wolf, fox, coyote, lynx, beaver, muskrat, marmot, collared pika, and a variety of smaller rodents. Modern Ahtna practices suggest that fat and grease from the harvested animals and fish were carefully rendered and stored in bladders from the intestine. Based on anthropological evidence and oral histories, people also hunted migratory birds such as swans, ducks, loons, geese, terns, long-tailed jaegers, and gulls, which used the lakes and rivers for seasonal nesting.[110]

To access hunting grounds, a network of foot paths extended though the Lake Atna country from the high divide south of Landmark Gap, around the Lower Tangle Lake outlet area,

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[107] Kari, "Ahtna Place Names Database," 156-159.
[108] VanderHoek et al., "Ice Patch Research and Monitoring," 185-200.
[109] de Laguna and McClellan, "Ahtna," 641–664.
[110] Kari, "Ahtna Place Names Database," 156-159; Reckord, *Where Raven Stood*, 76.

and south through to the Upper Copper River. In general, people used local paths for subsistence activities, while using longer trails for trade and occasionally for raiding. The first Euro-American record of this extensive trail system was authored by Walter C. Mendenhall, who, as part of the U.S. Geological Survey, made a reconnaissance from Resurrection Bay to the Tanana River in 1889. He made his way into the Alphabet Hills in August 1898. In the Tangle Lakes, he recorded that "the party discovered a well worn Ahtna trail leading through the Alphabet Hills to the outlet of Dickey Lake."[111] His party followed an Ahtna trail north, traversing first the series of esker ridges west of Upper Tangle Lake and later crossing to the east side of Middle Tangle Lake or First Lake at the portage between the two lakes. During his expedition, Mendenhall noted in his daily journal that "natives of Gulkana-Gakona Band had a fall camp south of the Delta River in the Tangle Lakes region… [They] (c)ross[ed] the Delta River for their fall hunting and trading with bands of the Lower Copper and Matanuska Rivers."[112] One such encampment, recorded as Mendenhall's 1898 "Ahtna Hunting Camp," lies in the Tangle Lakes area (Figure 1.2). Surrounding, there appeared to be nearby prehistoric sites with lithic debitage on lower ridges. Cultural components in this camp, such as the appearance of tools, hearths, modified wood, and charred (calcine) bone, all attest to methods of work.[113]

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[111] Walter C. Mendenhall, "A Reconnaissance From Resurrection Bay to the Tanana River, Alaska, in 1898," *U.S. Geological Survey Twentieth Annual Report* (1900): 280-286, 311-312.
[112] Ibid.
[113] Mendenhall, "A Reconnaissance From Resurrection Bay to the Tanana River," 285; West, *American Beginnings,* 40-45.

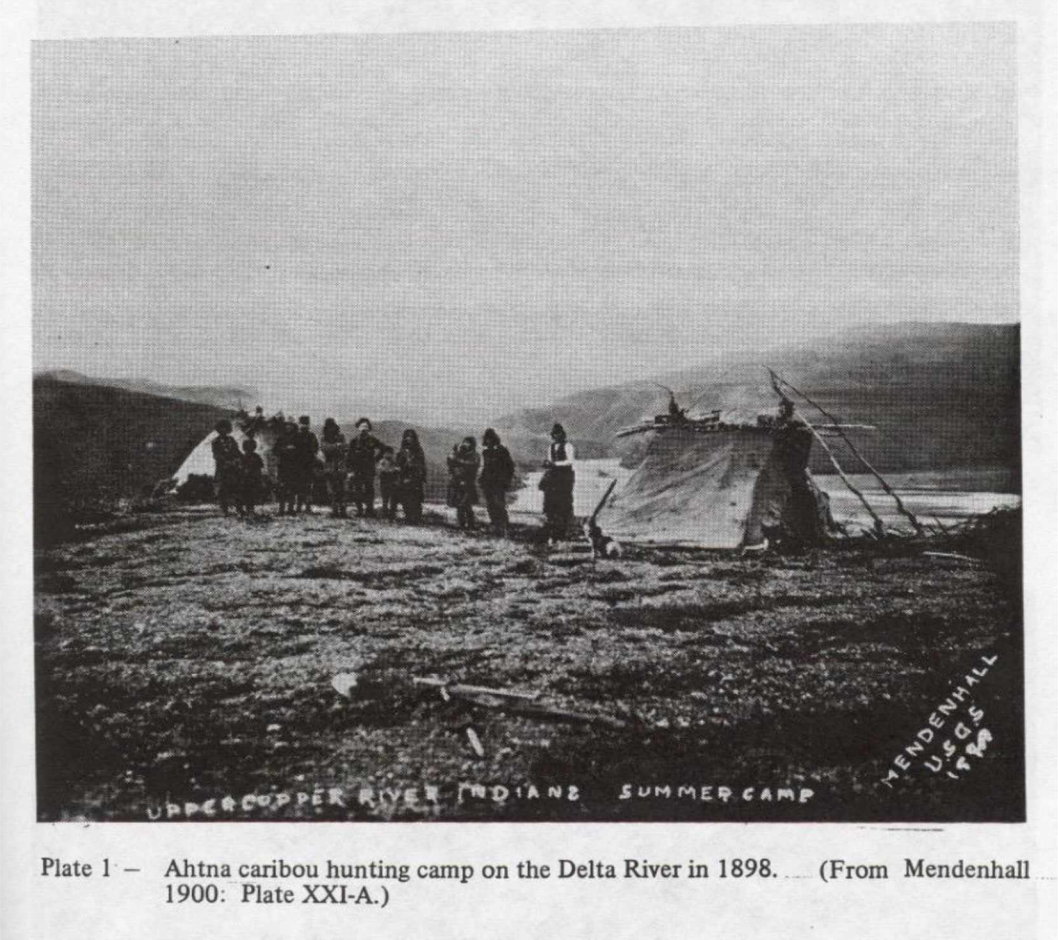

Plate 1 — Ahtna caribou hunting camp on the Delta River in 1898. (From Mendenhall 1900: Plate XXI-A.)

Figure 1.2 Ahtna Hunting Camp:
Photo of an Ahtna caribou hunting camp on the Delta River in the Tangle Lakes area from the Glenn 1889-90 Expedition.[114]

[114] Mendenhall, "A Reconnaissance From Resurrection Bay to the Tanana River," 412.

1.4. Conclusions

It is abundantly clear that the conditions of the sub-arctic environments exerted a strong influence on human cultures. The extensive documented ethnographic continuity in Alaska's vast river valleys and coastal transportation routes attests to a strong reliance on and sensitivity to the local environment prehistorically. People continually adapted to changing environments, testing the boundaries of their ecosystem, and incorporating natural phenomena into their cultural beliefs systems. It would, therefore, be impossible to conclude that the environment was ever static, unchanged, or "pristine". Whether influenced by humans, the building of caribou fencing, for example, or by natural phenomena, the Glacial Lake Atna wilderness has continuously been in transformation.

Archaeological evidence confirms that humans inhabited lands around Glacial Lake Atna. The lifecycle of the Ahtna people centered on the movement of animals. Their religious beliefs reflected deeply entrenched sameness between nature and humans. People lived and worked in the Glacial Lake Atna valley. They left their imprint on the earth. While the Wilderness Act of 1964 proposed that wilderness is a place that is an uninhabited place where the imprint of work is not noticeable. Yet, the archaeological record indicates a long, complex human history in this wilderness area. Thus, wilderness is not only a modern conceptualization, but one also inherently flawed. We must recognize that people have lived and worked in the wilderness since prehistoric times.

As the next chapter will demonstrate, modern hunters and rural residents continue to use the entire area of the Glacial Lake Atna as a place to live, work, and hunt. Systems of work, inhabitation, and subsistence remain deeply entrenched today. William Cronon notes that the conservation rhetoric stresses that "the primary value of wilderness is not as a proving ground for

young Huck Finns and Annie Oakleys." Similarly, the National Park Service has "preserve[d] a quality wilderness experience for the human visitor, letting her or him flex Paleolithic muscles or seek visions" or visit or pray.[115] And yet for millennia humans have continually lived and worked in wilderness.

[115] Cronon, "The Trouble with Wilderness," 1.

2. Work and Wilderness and the Frontier Period

2.1. The Idea of Wilderness

Long after prehistoric Lake Atna drained, and the boreal forest of south-central Alaska claimed Lake Atna's skeletal lake-bottom, the fable of Alaska's last frontier drew a host of hunters and trappers enticed by raw territory. While the lake drained, and in its place the Copper River had eroded a path toward the Gulf of Alaska, the wilderness maintained most of its dominant features. The boreal forest remained dense, populated by white and black spruce and clumps of low-growing brush. On the dried banks of Glacial Lake Atna, river terraces retained some stability over long periods. The cobbled remnants of the prehistoric shoreline were left behind as these rivers continued cutting toward their baselines. The nineteenth-century first Euro-American explorers traversed the same ridges that prehistoric users of the area preferred for scouting. A good hunting lookout does not change. The excellent mineral soil visibility and active deflation zones provided the best opportunities for hunting along the kettle ponds and lowlands below. If there were moose and caribou to take, then explorers, miners, and hunters who rushed into Alaska throughout the nineteenth century climbed atop these morainal hills to spot them. While the essential human interaction with the wilderness remains relatively unchanged over millennia, the modern narrative suggests a different history. The term *wilderness* itself distorts the actual experiences of humans and claims that the supposedly virgin lands and waters are somehow removed from the human experience.

The history of wilderness encompasses an immense breadth of study. It includes the dynamic ecology of past environments, the study of how environments change over time. It

incorporates data and statistics on ocean tidal movements, wind patterns, and the cycles of freeze-up and spring thaw.[116] It might investigate the movements of tectonic plates and how their relations to one another over time have ripped continents and their organic contents apart and formed new landmasses. Environmental histories also focus on flora and fauna—where and how they migrate, how they perish, and how they are harvested. Environmental history has thus provided a means to study Glacial Lake Atna, through rocks, hydrological movements, populations of fish and game, and the emergence of people. Environmental histories also involve a uniquely human category beyond the immediacy of their physical existence: human conceptualizations of nature.[117] The environmental historian William Cronon, writing in 1996, encouraged the adage that the time has come to "re-think" wilderness, noting that we must understand what it is and it is not, how humans have defined it throughout time, how humans have mapped and bordered it, and how humans have come to covet its resources.[118]

Many naturalists perceive the wilderness inhabited by Alaska Natives as somehow pristine and untouched. Euro-American history's original concept of wilderness conjured up the image of a savage and inhospitable place quite like the environment the first American colonists encountered. During the later frontier period, wilderness transformed into something fearsome and defiant. It was a place for character building, burly and manly. The idea of wilderness as a place of spender and spiritual awaking—one to be protected, managed, and *saved*—is a relatively new approach to wilderness born of the conservation movement of the mid-nineteenth century. As this chapter will demonstrate, the term *wilderness* as we understand it now emerged from romanticism and post-frontier ideologies. *Pristine* wilderness, or at least legally *designated*

[116] Worster, "Doing Environmental History," 4.
[117] Ibid.
[118] Cronon, "The Trouble with Wilderness," 7.

wilderness per the Wilderness Act of 1964, claims to be uninhabited, free from the imprint of work, and free of human labor. This chapter elucidates two fallacies that exist in wilderness management and refutes them by demonstrating that: 1) Wilderness is not, nor has its historically been, uninhabited 2) Wilderness inherently demands work; it is not a place of leisure; it is not a place devoid of man's imprint, sweat, or blood; and through various activities, people, work, and nature co-exist in wilderness.

When the first Euro-American men turned their attention north, they described the Alaska wilderness as exceeding other wildernesses; it possessed more virility, more expanse, more wildness than the "the pocket-sized" wilderness areas of the American West, Catton notes.[119] Alaska's vast size was that much more to combat. During this period, upending wilderness into an expanding American settlement was widely believed to be an inevitable task. It was not until much later, during what the American Public Broadcasting Service has coined the "Fierce Green Fire," or the environmental movement of the late 1960s and '70s, that protecting wilderness became a prominent political campaign. For hundreds of years prior, Alaska captured the attention of the American public and seemed to bristle at the idea of civilization.

2.2. Alaskan Exploration and Work

During the period of Alaskan exploration, one of America's most pervasive and seductive myths dominated national culture: Manifest Destiny. Men, compelled to civilize the territory, prepared to charge into untouched wilderness. While we know that Alaska has been inhabited by humans upwards of ten thousand years, various characters throughout history have claimed

[119] Catton, *Inhabited Wilderness,* 215.

credit for having "discovered" Alaska. Prior to explorers in the Russian Imperial Navy, such as Vitus Bering, and other explorers like Alexei Chirikof and Captain James Cook, missionaries of the Russian Orthodox Church, and fur-trappers, thousands upon thousands of Alaskan Indigenous peoples knew Alaska as home. In 1728, Bering and his party, dispatched from the far East by Peter the Great, spotted St. Lawrence Island and one of the Diomede Islands on the western coast of Alaska. It was not until 1741 that Bering sighted Alaska mainland. On July 16 of that year, Bering spied the mighty Mt. St. Elias in southeast Alaska and went ashore. Over a hundred years later, Euro-American explorers would look to Mt. St. Elias on their journey northward into the Copper River country. In the early years of the Alaska boom at the turn of the twentieth century, stimulated by exploration and trade in natural goods and minerals, thousands of prospecting hopefuls made their way north from the port of Valdez to explore the Wrangell Mountain Range.

In the mild mid-summer of 1898, the Cook Inlet Expedition party, members of which included the young geologist Walter Curran Mendenhall and Captain Edwin Forbes Glenn, broke into the country of the Wrangell Mountains.[120] "We are much nearer Mt Drum & the Wrangel [*sic*.] group generally," Glenn wrote on August 14, 1898.[121] Their journey was to take over forty days, between June 29 and October 23, 1898; slightly less than one-third of them spent traveling alongside the silty Copper River. Their party followed in the path of Lt. Henry Allen's groundbreaking 1885 expedition, fondly named "Alaska's Lewis and Clark Expedition."[122] In 1884, Allen wrote to his fiancée that "I am willing to forgo almost any benefit… for an attempt

[120] Mendenhall, "A Reconnaissance From Resurrection Bay to the Tanana River," 285, 311.
[121] Captain Edwin F. Glenn's handwritten diary keep during the 1989 expedition, 29, June- 23, October, 1989, UAA-HMC-0116, Box 1, Folder 1 &2, 15, Edwin F. Glenn Papers: 1889-1917, Series 1: Personal papers and photographs, Archives and Special Collections, Consortium Library, University of Alaska Anchorage, AK.
[122] Robert E. King, "Alaska's 'Lewis and Clark Expedition,'" *BLM Alaska Frontiers* (Summer 2004): 3-5.

at exploration in Alaska."[123] Allen initially endeavored to explore the Copper River, which remained one of the largest uncharted rivers in the territory. Allen's company, in total, explored over 1,500 miles of wilderness in only five months; he completed the route of Frederick Schwatka's 1883 expedition, which was extensive but went unmapped, and Lieutenant William R. Abercrombie's subsequent expedition of 1989, in which Allen turned back after traversing more than sixty miles upstream of the Copper River Delta.

Glenn's expedition party, following in the footsteps of many before them, found the landscape to be as severe and magnificent as promised: from the Copper River Delta, northward, over Isabel Pass, the party followed the Copper River to its confluence with the Gulkana. The Wrangell Mountains dazzled in the distance and the well-drained ridges and slopes of the Tangle Lakes were covered with soft alpine-tundra. Swampy areas between the lakes and ridges hosted several cheery, flowering plants like the cranberry, blueberry, and kinnikinnik, lupine, arnica, and wild Alaskan rose. Blue skies and the colored hills, however, masked the coldness of the northern environment. Vast glaciers, some the size of our continental states, crept between the foothills of the Wrangell Range, the same glaciers that today are contributing elements to the National Wilderness Preservation System. Rangers at the National Park Office in Copper Center remark that it is hard to describe the Wrangell area while avoiding superlatives. The Bagley Ice-field encompasses multiple glaciers over 127 miles long and 3,000 feet in thickness; the Nabesna Glacier is the world's longest interior valley glacier, stretching some 53 miles; the Malaspina Glacier, tucked into the southern base of the Wrangell Mountains, is North America's largest piedmont glacier.[124] The Wrangell-St. Elias National Park and Preserve travel brochure promises

[123] Melody Webb, *Yukon: The Last Frontier* (Lincoln: University of Nebraska Press, 1993), 106-109.
[124] "Glaciers," United States Department of the Interior, National Park Service, Wrangell-St. Elias National Park and Preserve, last modified January 3, 2020, https://www.nps.gov/wrst/learn/nature/glaciers.htm.

tourists a wilderness experience: "long before recorded history the human experience was conceived in and born of wilderness. It is reassuring to know that the experience is available in those places of truly majestic wilderness—places like Wrangell-St. Elias."[125]

In 1879, another wayfaring white man, the naturalist John Muir, upon exploring Glacier Bay in search of glaciers, science, and spiritual fulfillment, remarked that "it seems as if surely we must at length reach the very paradise of the poets, the abode of the blessed."[126] Such hyperbolic rhetoric, which suggests that human experience is born of wilderness and that wilderness therefore must remain unchanged, directly contradicts human history in wilderness areas.

As a nation, we are deeply fascinated with the "*Lewis and Clark*s" of history. In the beginning, frontier fables go, the wayfaring "First White Men" ventured into the primitive wilderness. American wilderness writer Bob Marshall ritualized the journey of Lewis and Clark during his childhood as a blooming forester; for the naturalist Charles Sheldon, the iconic frontiersman was Daniel Boone, for ecologist William S. Cooper, it was the wandering John Muir.[127] These national nature writers have, perhaps unintentionally, shaped modern ideas on nature. Bob Marshall, forester, writer, and wilderness activist authored *Arctic Village* and "The Problem of the Wilderness," which ran in Scientific Monthly in February 1930.[128] Charles Sheldon, too, between his work with the sportsmen's activism through the Boone and Crockett Club and his campaign for national parks in Alaska, shaped naturalism. Cooper, a botanist at the

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[125] Ibid.
[126] John Muir, *Travels in Alaska* (Boston: Houghton Mifflin, 1915), 80-90.
[127] Catton, *Inhabited Wilderness,* 215.
[128] Robert Marshall, *Arctic Village: A 1930's Portrait of Wiseman, Alaska* (Fairbanks: University of Alaska Press, Classic Reprint Series; 1 edition, July 1991) 12; Robert Marshall, "The Problem of the Wilderness," *Scientific Monthly* 30 (February 1930): 141-148.

University of Minnesota, used his prominence as a member of the Ecological Society of America to lobby President Calvin Coolidge for the protection of Glacier Bay and write about the scientific discoveries awaiting the explorer.[129] On the pages of each of their influential works, these nature writers did not describe wilderness as the fabled first Euro-Americans saw it, but perhaps as they imagined the untouched Alaskan wilderness to be. In environmental historian Richard White's words: "In this construction, the first white men travel through nature untouched by human labor and are awed by it."[130]

The poet Robert Service's *The Spell of the Yukon,* published in 1907, manufactured the sense of awe deeply ingrained in the American conscious. "There's a land where the mountains are nameless," Service declares, sure of godliness in the northern territories, "and the rivers all run God knows where/ There are lives that are erring and aimless.... / There are valleys unpeopled and still/ There's a land—oh, it beckons and beckons/ And I want to go back—and I will."[131] In *Arctic Village,* Marshall writing more than two decades later, described the populated, happy community of Wiseman as a "vast lonely expanse," echoing the words of Service.[132]

Such descriptions of primeval wilderness do not accurately describe the wilderness the first Euro-American explorers in the Wrangell Mountain region encountered. For thousands of years, the Ahtna people have named the far-off peaks in the Wrangell Mountains that lay nameless on Euro-American maps.[133] During the Russian colonial period, trade into the Copper

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[129] "William S. Cooper: A Vision of Preservation," Glacier Bay National Park and Preserve, Alaska, accessed January, 2020, https://www.nps.gov/glba/learn/historyculture/william-s-cooper-a-vision-of-preservation.htm.
[130] White, "Are You an Environmentalist?" 176.
[131] Robert Service, *The Spell of the Yukon and Other Verses* (News York: Barse & Hopkins, 1907) 30.
[132] Marshall, *Arctic Village,* 12.
[133] Kari, "Ahtna Place Names Database," 156-159.

basin employed the use of Native foot-paths. Lt. William R. Abercrombie explored the area in 1884, and reported a deep and well-worn foot path up Keystone canyon and along the banks of the Tiekel River.[134] The historical record confirms that the first explorers, Abercrombie, in 1884, Allen, in 1885, and Mendenhall and Glenn, in 1898, knew of the native population in the area and, in many cases, depended on their aid for survival.[135] For example, accounts of Allen's expedition reveal that he learned how to build and navigate skin river-boats from the Natives in the area.[136] The actual frontier experience, therefore, directly contradicts the mythology of an uninhabited wilderness devoid of human work.

Nevertheless, somehow "we have implicitly presumed that the journey of the first white men must have been one long backpack cross the West," notes historian Richard White.[137] Writing of the Lewis and Clark adventure, White points out that "Lewis and Clark [did not] spend much time being staggered by the beauty and the sublimity" of the wilderness surrounding them, "they are not blind… but matter of fact."[138] A member of the Lt. Allen expedition, Private Frederick Wildon Fickett, was not preoccupied with the scenery and instead detailed much of his toils. "These, [scraps moose meat found, abandoned on the floor of an Ahtna camp] that neither they nor their dogs would eat, we were forced by hunger [to eat]" he explains, "this is it. Allen's birthday, and he celebrated by eating rotten moose meat."[139]

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[134] There is evidence that an Ahtna trail system was used at some point to transport copper and other metals to the traders at Nuchek by way of the Keystone Canyon route north of Valdez; See: Jim and Nancy Lethcoe, *A History of Prince William Sound, Alaska*, (Valdez: Prince William Sound Books, 2001), 7-16.
[135] Edwin F. Glenn Papers, 15.
[136] Webb, *Yukon,* 106–109.
[137] White, "Are You an Environmentalist?" 177.
[138] White, "Are You an Environmentalist?" 176.
[139] Fred Wildon Fickett Papers, 1887-1906, UAA-HMC-0108-seriese8a-11-7, Box 18, 18, University of Alaska Anchorage Consortium Library, Archives & Special Collections, Anchorage, AK.

The stories that frontier culture spun of the first white men to enter unfamiliar territory led people to anticipate explorers would fill their journals with "respectful observations" of nature, as White notes.[140] Instead, the collection of adjectives found on these journal pages tells of heavy, bodily *work*. The frontier period in Alaska was fueled by work. Pioneers were the forest felling, pick-ax wielding, labor force accredited with devirginizing the territory. Captain Edwin Glenn filled his daily journal with long-winded descriptions of work. He massaged his tired muscles; he developed rheumatism. He bartered his dearest possessions for a new pair of boots. Lengthy and tiresome descriptions of the blisters on his feet take up pages in his botanical journals. The Cook Inlet Expedition party marched hundreds of grueling miles through rivers and bogs, on foot and atop bedraggled, small ponies. The soils proved to be thin and acidic, consisting of sandy, silty loess covered by a thick mossy organic layer typical of alpine tussock/tundra communities. "Waltzing grass," otherwise known as the tussock, rolled the ankle and made for miserable trekking. "What can I say to make prospectors appreciate difficulties of this trail?" Glenn asked at their 34th camp on August 28.[141] "My left heel again bothered me and I was badly chafed when I arrived in camp…. This is very hard on clothing & many days of it will make us all naked. My underwear is playing out rapidly and will scarcely last until my return."[142] Simply put, "I am quite anxious to get back alive."[143]

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[140] White, "Are You an Environmentalist?" 177.

[141] Edwin F. Glenn Papers, 31-36.

[142] Ibid.

[143] The "24th Camp. August 1798. Even on the high foothill we crossed the moss was deep and water was standing in the holes although the inclination was not less than 45°. A great deal of this grass was called by Corpl Young 'Waltzing grass' and grows in tufts that stick above the water about a foot or more & and when one steps on it it twists & turns under him causing him to lose his balance half the time. A great part of the time one foot was in a hole up to & above the knee. Once I went in to my hips with the other foot perched in the air… What can I say to make prospectors appreciate difficulties of this trail;" See: Edwin F. Glenn Papers, 1-4, 6, 30, 36.

2.3. The Last Frontier

Over the intervening years, from 1897 through 1945, the frontier period inspired more work and brought north more workers. The gold rush was the defining event of the nineteenth-century Alaska frontier. If the Alaska wilderness is the nation's Last Frontier, then the prospector-hunter-trapper, or "sourdough," fittingly took his place at the center of this mythology just as the pathfinder defined the previous generation. National magazines and newspapers followed the stories of America's first intrepid backcountry men. Frontier towns, rough and "wide open," sprang up in the wilderness areas from bustling Dawson City to the remote Wrangell Mountain towns of McCarthy, Kennecott, and Chisana.[144] Migrants sought early-pickings of gold, fish, and game. Following the Copper River country, people walked on into the goldfields of the Klondike, Forty-mile River, and Upper Yukon River. Stampeders who failed to reach the Klondike struck it rich here in the Glacial Lake Atna Wrangell Range; prospectors made discoveries along Dan (1901), Golconda (1901), Chititu (1902), Young (1902), and Bonanza (1913) Creeks as well as further toward the northern end of the Glacial Lake Atna valley in the Tangle Lakes corridor.[145]

Miners and trappers set to work on access trails into the Interior. When gold was discovered near Fairbanks in 1901, prospectors established an inland route through the Tangle Lakes corridor. The Valdez-Fairbanks Trail (or Valdez Trail) extended the length of the Copper River Basin alongside the Wrangell Mountains and wound northwards past the Gulkana River

[144] Charles Sheldon, *The Wilderness of Denali,* (New York: Charles Scribner's Sons, 1930), 4.
[145] Geoffrey T. Bleakley, *Contested Ground: An Administrative History of Wrangell-St. Elias National Park and Preserve, Alaska, 1978-2001* (Anchorage: U.S. Department of the Interior, National Park Service Alaska Systems Support Office, 2002), 5.

drainage to Isabel Pass. Constructed in 1902, it became the most popular overland route to prospecting claims in the Interior. In 1904, the *Alaska Prospector* newspaper reported the discovery of gold in Eureka Creek and that one miner by the name Jim Finch had sluiced the creek.[146] The U.S Army constructed a telegraph line suite along the route, and the U.S Post Office provided for mail service at those intervals where settlers established roadhouses. By 1904, miners were extracting placer gold at Valdez Creek and had established the main freighting route from the Gulkana up the West Fork to MacLaren. Miners relied elusively on the Cantwell-Valdez Creek trail for transporting heavy freight from the port in Valdez throughout this period. In 1906, the newly created Alaska Highway Road Commission made improvements on the trails its highest priority to provide amenities to hunters and trappers.[147]

According to historian Theodore Catton, Alaska sportsmen were among the first consumers of what a later era would call the "Alaska wilderness experience."[148] At the turn of the twentieth century, hunting was the grandest experience a young man could have. They regarded the wilderness as the last bastion of manliness and emphasized the importance of nature for character building. If wilderness existed, it existed to serve as a proving ground for young men. Teddy Roosevelt-era hunters and fishers consumed wilderness. Around this time, a young man by the name of Charles Sheldon traveled to Alaska from Vermont in search of game lands north of the Alaska Range. According to historian Frank Norris, Charles Sheldon had a "strong altruistic streak."[149] He developed a deep interest in the study of mountain sheep and, following

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[146] *The Alaska Prospector,* October 13, 1904, 1.
[147] In January 1906, the Alaska Road Commission started construction on the Gulkana "cut-off" road to Big Delta. The Gulkana-Big Delta telegraph line was completed in September of that year and included the construction of four telegraph stations; See: Lethcoe, *A History of Prince William Sound,* 56.
[148] Catton, *Inhabited Wilderness,* 93.
[149] Frank Norris, *Crown Jewel of the North: An Administrative History of Denali National Park and Preserve, Volume 2* (Anchorage: Alaska Regional Office, National Park Service, 2008), 14.

the teachings of biologists Edward W. Nelson and C. Hart Merriam, he traveled throughout Alaska observing and occasionally harvesting the little-known Dall's Sheep. Sheldon was among the first Alaskan "hunter-naturalists," or "sportsmen."[150] The general rhetoric of the "sportsman" explained that sportsmen were to enjoy nature within the bounds of the sportsman's code. According to the code, a sport hunter measured his success by the quality of the hunt, not the quantity of the take. The sport hunter detested a "sure" kill. The Tangle Lakes area provided the ideal wilderness — challenging, remote, and flush with game.[151]

Thus, the sportsman's wilderness experience, like that of those who hunted and fished before him, also involved a considerable amount of work. Richard White explains that hunters and fishermen "have known nature by feeling heat and cold… They have known nature by shaping wood and stone, by living with animals, nurturing them, and killing them."[152] They knew trails by name but also by distance and grade; they evaluated the topography not in terms of aesthetic beauty but by the difficulty of the hike. During the frontier period, hunters and trappers moved into areas that are now within our wilderness preservation system, building cabins, cutting trail, and running sleds.

During the spring thaw of 1906, a 38-year-old Sheldon undertook a voyage down the great Yukon River and, under the guidance of Klondike miner Harry Karstens, trekked overland into the Denali valley. Atop a hillside near Wonder Lake, Sheldon, in Norris' words "waxed ecstatically when he first saw Mount McKinley (in mid-July)," and, overwhelmed by Alaska's scenery and fish and game, he vowed to return.[153] He recognized that more profound knowledge

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[150] Norris, *Crown Jewel of the North,* 14.
[151] Catton, *Inhabited Wilderness,* 93.
[152] White, "Are You an Environmentalist?" 172.
[153] Norris, *Crown Jewel of the North,* 14.

of the Dall's Sheep "could not be learned without a much longer stay among them."[154] The first time he departed Alaska, deeply moved by his adventure and leaving only on the very last Yukon River steamboat of the season, "he did so with overriding convictions" that he must live in the interior for an entire year.[155]

Upon his return the following year, Sheldon set to work building a cabin on the Toklat River. He filled the hours of unending daylight traversing the terrain and collecting various specimens for study. To furnish his collection, he hunted animals, killed them, stuffed them, and then he put them on display outside his home. Many of the specimens that Sheldon collected, as well as his field notes and journals, are now housed in the National Museum at the Smithsonian as part of the conservationist collections. Overall, the first hunters and trappers left an imprint of their work plainly visible on the landscape. Today, Sheldon's cabin remains. Other hunting and trapping cabins dot the map within Wrangell-St. Elias National Park and Preserve.[156]

The volume of interloping hunters in the area after the construction of routes such as the Valdez-Fairbanks Trail spurred residents, Charles Sheldon particularly, to advocate for the protection of game. The sportsman's "code," unwritten, honorable, and laudable, ensured the integrity of some hunters. However, not all hunters were self-regulated. According to Catton, sportsmen generally believed that the so-called "pothunter," or one who hunts for food rather than sport, who did not obey the game laws, "was not incorrigible; he was simply backward."[157] Gentlemen could convert the pothunter into a sportsman in time. Indeed, as early as 1900, prospectors and miners hunted for the "pot" unregulated, with no significant ecological impact.

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[154] Ibid.
[155] Ibid.
[156] Ibid.
[157] Catton, *Inhabited Wilderness,* 215.

The market hunter, however, the sportsman despised. Indeed, "the destruction of game is far more often affected by location residents than it is by visiting sportsmen," notes Catton, "the chief evil-doer … is the professional hunter… who kills for the market."[158] The market hunter looked for the easy kill, the prodigious kill, the big head and big horns, and frequently left the meat to rot. They did not discriminate between males and females in a species. The market hunter looked for the most effective weaponry and moved from place to place, showing little concern for big game health.

Sportsmen did their part to conserve the supply of wildlife for their fellow hunters and gained, in turn, an appreciation for nature. Individual sportsmen were more likely to identify with the American frontier image than conservation; however, they eventually became conservationists. Rifle, artillery, and hunting clubs led the campaign for protected game areas and set the standard for turning sportsmen into conservationists. Founded by Theodore Roosevelt in the 1880s as a gentleman's hunting club, the Boone and Crocket Club "stood at the forefront of wildlife conservation after 1900," writes Catton.[159] The Boone and Crockett Club elected Charles Sheldon as a member in 1905.[160]

Before the early 1900s, conservation had not been an Alaskan concern. The only land set aside for conservation at the time was the Alexander Archipelago Forest Reserve, a road-less area that would eventually become the Tongass National Forest; the Afognak Forest and Fish Culture Reserve, established in 1892; and Indian River Park, a small reservation just outside Sitka. President Roosevelt's closure of Alaska's coal lands in 1906 led to widespread unrest and confirmed the skepticism toward conservation. Miners were required to make their activities

[158] Ibid.
[159] Ibid.
[160] Ibid.

made legal and valid under the act by filing mining claims, or else abandon and forfeit lands by November of that year. A congressional supplemental order eventually pushed back the deadline to file until August 1 of the following year. In a rage, one resident of Southeast Alaska, Mr. Joslin, testified in a hearing before the Committee of Public Lands that "I understand President Theodore Roosevelt, when it was brought to his attention, said, 'Yes, yes; give them more time. If we suspend their entries two months give them six months' — dealing with men as though they were children, dealing with their rights as through it was a trifling thing, to suspend them and restore them at his autocratic will."[161] Many Alaskans felt themselves out of place in political circles and marginalized by the far-away politics in Washington D.C. However, Sheldon was a born and bred Easterner; he was financially comfortable, politically savvy, and "moved with ease among the members of the Eastern elite," writes Frank Norris.[162] Sheldon soon integrated himself in the Boone and Crockett Club. During that time, the Club urged sportsmen to support game protection laws and regulations and informed the game laws that limited tags numbers, seasons, and the use of specific technologies. Many sportsmen, therefore, advocated for the creation of game commissions and authorized the appointment of game wardens. Sheldon first wrote of a Mount McKinley National Park on January 12, 1907, in his private diary. However, Norris notes that Sheldon continued to hold onto this idea over the next years: this place, he wrote of the Mount McKinley area, "would make an ideal park and game preserve…" and he thought of the "enjoyment and inspiration visitors will receive."[163] He and Karstens "fastidiously" observed wildlife throughout the Mount McKinley area—noting their migration patterns and numbers in hopes of creating a game preserve boundary. During the 1900s,

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[161] United States Congress Senate Public Hearing, *Alaska Coal Lands: Hearing on S. 8270 A Bill Relating to Coal Claimants in Alaska, Part 1-3,* (Washington D.C., 2016), 260-61.
[162] Norris, *Crown Jewel of the North,* 13,17.
[163] Ibid.

Sheldon's preserve was referred to by the western name given to its tallest peak after President William McKinley (the National Park Service would later revert back to Athabascan name: Denali.) During this period, big-game management and the sportsman's regulation of wilderness reflect their acknowledgment of work and extractive human use.[164]

Sportsmen achieved their first victory in Alaskan hunting legislation in 1902 with congressional passage of an Alaska Game Law. A slightly more stringent game law followed in 1908. Aided by James Wickersham, a former district judge from Fairbanks and Alaska congressional delegate, Sheldon finally pitched the idea of a McKinley area park during the Boone and Crockett Club's annual dinner in 1909.[165] In the proposed McKinley Park, Kantishna-area constituents demanded that the enabling park bill include language to "take and kill game or birds therein as may be needed for their actual necessities; but in no case shall animals or birds be killed in the said park for sale or removal therefrom, or wantonly."[166] The wording of this park bill was perhaps intentionally vague. Sheldon believed that local support for wildlife conservation must precede a national park. Sheldon's assessment likely held true throughout Alaska, including in the Glacial Lake Atna area wilderness. A man by the name of Madison Grant, who authored "Condition of Wild Life in Alaska" in *Hunting at High Altitudes,* took the opposite view and one that was increasingly taking hold across the American West.[167] Grant had also been a member of the Boone and Crockett Club since 1893, was a close personal friend of Theodore Roosevelt, co-founded the Save the Redwoods League in 1918, and is more broadly credited as a savior of big-game species such as the American bison, as an organizer of the

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[164] Ibid.
[165] Ibid.
[166] Catton, *Inhabited Wilderness,* 78.
[167] Catton, *Inhabited Wilderness,* 78, 215; Madison Grant, "The Condition of Wild Life in Alaska," in *The Smithsonian Report* 1909 (Washington, D.C.: Government Printing Office, 1910), 522.

American Bison Society. He thought that a federal Alaska game law should "act sooner rather than later" to establish game preserves and limits. Grant also opposed any reform of the Alaska Game Law that would allow Alaskans regulatory control over bag limits and closed seasons. Local hunters and subsistence hunters, while they had done so much for early conservation efforts, were somehow mistrusted and maligned by Outside conservationists.[168]

Over the next decades federal action on Alaska lands remained in limbo. As a result, sportsmen hunted unrestricted throughout the Glacial Lake Atna area. Alaskan Frank Glaser recounted a laborsome hiking and fishing trip he and a companion made in 1922 out of Fielding Lake near the Tangle Lakes area. On one fishing expedition of many, they caught quite a few large lake trout—about "12 pounders."[169] Mid-century, John E. Nelson trapped in the area for several years, and in 1953, the *Fairbanks Daily News-Miner* reported on his remote lifestyle. He chartered a plane to the Tangle Lakes, and along with his new wife, trapped for the winter. Their nearest neighbor was about twenty miles to the west at Paxson and accessible by snowshoe. The romantic sportsman lifestyle was predicated on the sparse human population, the remoteness, bountiful fish and game, and to some extent, the false narrative of virgin territory.[170]

The construction of the Fairbanks-Valdez Trail provided access for recreationists and hunters from the tidewater into the Interior. Additional roads were passable by passenger bus and freight trucks as early as 1920. Various trails and user-created spurs began to wind through much of the Copper Basin territory. "Hunters were able to tap a new and virgin game area on the upper Susitna this year," Clarence J. Rhode, the regional director of the U.S. Fish and Wildlife Service,

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[168] Grant, "The Condition of Wild Life," 522.
[169] *The Fairbanks Daily News-Miner*, June 1, 1956, 8.
[170] Jangala, "A Preliminary Report of the Gulkana Project," 17-20; *Fairbanks Daily News-Miner*, September 10, 1953, 2, October 16, 1953, 2, December 17, 1953, 12, and June 1, 1956, 8.

reported in 1953 after the completion of the Paxson-Tangle Lakes road.[171] Hunters and fishermen from around Alaska, and especially from the urban areas in Fort Greeley and Fairbanks, were able to "get at moose and caribou more readily," specifically in the northern half of the Tangle Lakes and Gulkana River areas, Rhode reported.[172] Land managers were surprised by the volume of hunters entering the Tangle Lakes. On one day, the game commission counted fifty-three hunters' cars along the twenty-mile long road from Paxson to the Tangle Lakes; a week later, eighty-five cars were recorded. This twenty-mile road roughly followed the path of the old Valdez-Fairbanks Trail from the junction of the Richardson Highway to Valdez Creek. The Road Commission eventually extended the route, and although it was left largely unpaved, it stretched to Cantwell, near Mt. McKinley, and was named the Denali Highway. One agent remarked in 1957 that some five hundred hunters were along the Denali Highway, and that the area was now "one of the most heavily hunted in this part of Alaska."[173] Just to the south, in the Wrangell Mountains, local residents abounded mining in the 1920s and '30s as mineral veins ran dry and sought other ways of supporting themselves. Fur prices remained high, and many took up professional hunting, guiding, and trapping as well as commercial fox-farming; all of these professions were laborious and required long hours of work in wilderness areas.

[171] *Fairbanks Daily News-Miner*, September 10, 1953, 2, October 16, 1953, 2, and December 17, 1953, 12.
[172] Ibid.
[173] *Anchorage Times,* August 23, 1957, 1.

2.4. Early Conservation Efforts

The suggestion of subsistence hunting in parkland was counteracted by the 1916 National Park Service Act which took a conservative approach to hunting on federal lands. While initially imagined in the spirit of outdoorsmanship, the National Park Service Organic Act of 1916 mandated the "conservation of scenery… in such a manner by such means as will leave them [resources] [totally] unimpaired."[174] According to Catton, Grant's standpoint on the Alaska game laws represented a differing "view of the way the Alaska Frontier was developing— two versions of the Alaskan frontier myth—" the first version described the frontier as a virgin territory, flush with game and providing for the frontiersmen experience, and the second described Alaska as the last, precious wild place.[175] Grant imagined that Alaska's position in the far north, remote and removed, presented an opportunity to save it from the ecological destruction that had occurred across the western frontier.[176] Alaska's non-Native population was small and transient; miners and trappers had not yet transformed the landscape.

The historian Roderick Frazier Nash, writing early in the twenty-first century, acknowledged that the relative scarcity of wilderness by the dawn of the twentieth century was a precondition of its recognized value.[177] Where our forefathers, Americans heading west after the Civil War, saw land in need of civilization, Alaska wilderness possessed more expanse than that remaining in the continental United States, and there its wilderness possessed more authenticity than the smaller wilderness areas elsewhere. Primarily, the foundations of today's National Park

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[174] National Park Service Organic Act of August 25, 1916., U.S Public Law 64-235, Stat. 535 [hereafter cited as Organic Act].
[175] Catton, *Inhabited Wilderness,* 78.
[176] Grant, "The Condition of Wild Life," 522.
[177] Roderick Frazier Nash, *Wilderness and the American Mind* (New Haven: Yale University Press, 2001), 379.

management lie in the rhetoric espoused beginning over a century and a half ago during the burgeoning environmental movement of Henry David Thoreau, writing in the 1840s and '50s, and later, Aldo Leopold and Bob Marshall. Their writings about nature mourned the "lost" American wilderness and the later ones protested similar ecological destruction in Alaska. From his cabin porch in March of 1856, beholding Walden Pond, Thoreau lamented that, "when I consider that the nobler animals have been exterminated here,"— the lynx, wolf, bear, moose, beaver, and the fox among them,— "I cannot but feel as if I lived in a tamed and, as it were, emasculated country."[178] He suggested that should wilderness be synonymous with virility, then a changed wilderness, one in which people lived and perhaps altered as a condition of living, is one sullied. Writing nearly a century later, in 1930, Bob Marshall, proclaimed that "wilderness furnishes perhaps the best opportunity for pure esthetic rapture;" he continued that the preservation of these "few samples of undeveloped territory" was critical and that "the only trace of that wilderness which has exerted such a fundamental include in molding American character will lie in the musty pages of pioneer books."[179] Marshall explained: "There is just one hope," and "that hope is… of spirited people who will fight for the freedom of the wilderness."[180] Marshall's travels in Alaska, from Glacier Bay to north of the Brook's Range, only reinforced his affinity for wilderness. Eventually, the idea of wilderness preservation would overtake popular culture.

Under the enabling legislation, National Park Service unit managers in Alaska began removing the human and the hunter from wilderness areas. After the construction of the Alaska Railroad, which made travel into the Interior much easier, Wickersham and Sheldon moved to

[178] Cronon, *Changes in the Land,* 16.
[179] Marshall, "The Problem of the Wilderness," 141-148.
[180] Marshall, "The Problem of the Wilderness," 145.

draft a park bill (H.R. 14775). Wickersham submitted this bill to the House of Representatives in 1916 and, after various park boundary amendments, President Woodrow Wilson signed it on February 26, 1917.[181] Thus, Alaska's first National Park, Mount McKinley National Park, was established. However, the campaign to protect wilderness in Alaska had just begun. Alaska possessed nearly one hundred million additional acres of land awaiting official designation, much of it wild, scenic and possessing similar wildlife as Mount McKinley. Hunters could still harvest game across much of the Interior, including in the areas of Glacial Lake Atna near the Tangle Lakes. After all, according to Grant, Alaska was on the brink of its own "apocalypse" and, if "Alaskans were given a hand in setting bag limits and closed seasons, it would be the death knell of many species of game."[182] As reporter Craig Medred wrote in *Anchorage Daily News* in 2016, within National Parks and wilderness areas, in the effort to protect wilderness, "cutting down trees… to build log cabins became 'timber theft.' Burning forests to clear land for agriculture or underbrush to attract game became 'arson.' Hunting game for meat, except under carefully regulated conditions, became 'poaching.'"[183] The National Park idea, thus imposed a construct on the physical world where rangers bordered, gated, and patrolled wilderness. Catton notes that over the next decades, federal game wardens would patrol the proposed game reserves and parks and aspire to make them "as thoroughly controlled as the Yellowstone Park."[184]

For many then and now, there is perhaps no image that is more contrary to the idea of a National Park than that of a human killing an animal. For many, hunting represents an intrusion into nature, a cutting of the ecological fabric. Other consumptive uses of natural resources like

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[181] Norris, *Crown Jewel of the North,* 25.
[182] Grant, "The Condition of Wild Life," 522.
[183] Craig Medred. "Fuzzy Math of Alaska Subsistence: Too many People, not Enough Fish, Game," *Anchorage Daily News*, July, 2016.
[184] Catton, *Inhabited Wilderness,* 78.

logging or mining rarely manifest the same, visceral reactions from the public. However, the hunter and the hunt are arguably more naturally occurring in healthy ecosystems than the manufactured natural setting of National Parks. Thomas Andrews, in the chapter "The Feds" in *Coyote Valley,* thoroughly discusses the history of National Park Service management of the Colorado's Rocky Mountains' Kawuneeche Valley, reminding readers of the mutualistic role that hunting can play in wilderness. Contrary to how Madison Grant imagined game health under federal management, Rocky Mountain hunting regulations disturbed ecosystem balance rather than protecting it. Within the bounds of the Rocky Mountains, both elk and moose, introduced to the Colorado Valley in the mid-1900s, became far too populous. Elk populations altered the relationship between willow trees and beavers, a dynamic that has supported riparian health for thousands of years. Under the average pressure that hunting or predation introduces, ungulates keep a more transitory feeding pattern. Within the National Park, however, bothered perhaps only by the tourist's flashing camera, ungulates feed uninhibited on willow thickets throughout the Colorado River lowlands. While tourists are pleased to view an abundance of these massive beasts, their presence masks an invisible decline in ecology. Without the willow, not a single beaver colony remains in the Kawuneeche. "Beavers survived the onslaught of American fur traders, it seems, only to die out under National Park Service management," writes Andrews.[185] The collapse of the beaver populations has shriveled riparian areas that feed on the high-water tables and saturated soils that beavers create. It is improbable that these riparian areas — "the heart and soul of the Coyote Valley bottomlands for at least ten millennia" — will be able to rebound.[186]

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[185] Thomas Andrews, *Coyote Valley: Deep History in the High Rockies* (Cambridge: Harvard University Press, 2015) 11-12.
[186] Ibid.

Nevertheless, conservationists around the U.S. marveled at the newly minted Mount McKinley National Park in the Alaska territory; they were delighted by the idea of preserving the scenic value of further wilderness areas. In 1937, Washington Senator Lewis B. Schwellenbach and Alaska's nonvoting delegate, Anthony Dimond, turned their eyes to the vast Wrangell Mountains. When Ernest Gruening, then director of the division of Territories and Island Possessions, joined the conservation effort, he put forth a proposition to create a new park unit in the Chitina Valley which he named the Alaska Regional National Park or Paranormal National Park. "I have traveled extensively," Gruening argued before the National Park Service regional director, "It is my unqualified view that this is the finest scenery that I have ever been privileged to see."[187]

Gruening's campaign for park lands was also in part fueled by the economic incentives of wilderness tourism. Developing Alaska wilderness into an arena for play (not work) and leisure might have economic benefits. Recreators might be willing to travel from faraway places in order to visit the Wrangell Mountains. Much like Bob Marshall, other hikers and campers might rationalize paying a park entrance fee in order to witness the "pure esthetic rapture" that wilderness provides. Creating such parks would have negative consequences, as well, however, "Saving an old-growth forest or creating a wilderness area is certainly a victory [for the environment]," writes Richard White, "but it is just as certainly a victory for backpackers and a defeat for loggers. It is a victory for leisure and a defeat for work."[188] The work of local people who used the Wrangell wilderness area for extractive purposes—logging, hunting, and fishing included—was devalued. Leisure became associated with economic elitism and created a rift

[187] Geoffrey T. Bleakley, *An Administrative History of Wrangell-St. Elias National Park and Preserve, Alaska, 1978-2001* (Anchorage: National Park Service Alaska Systems Support Office, 2002) 11.
[188] White, "Are You an Environmentalist?" 173.

between those who could afford to visit National Parks and those who had long worked in such wilderness areas. National Park historian Geoffrey T. Bleakley notes that Wrangell-St. Elias National Park area resident Jerry Miller, for instance, remarked that "the park [is] set up for the elite. The real Alaskan… will never use this place. They are squeezing out the real people. They are making me into a criminal for gathering firewood to keep my wife and baby warm."[189]

In the end, however, Bleakley noted that when the Secretary of the Interior brought the park proposal before President Franklin D. Roosevelt, Roosevelt responded with: "I believe that the fees collected from the small number of persons that may be expected to visit the area will fall far short of the amount required for annual protection and maintenance. In the circumstances, I deem it appropriate to withhold…" from creating a park unit in the Wrangell/ Glacial Lake Atna area.[190] In addition, in 1941, the Superintendent of Mount McKinley Park, Frank Been, traversed the Wrangell Mountains and was thoroughly unimpressed. He begrudgingly admitted that "when the clouds lifted in the afternoon that we were leaving we obtained a distant perspective which was pleasing. But not impressive compared to many other sections of Alaska;" Been concluded that while there may be reason to consider parts of south-central Alaska for an international park, "that subject, however, is for future study."[191] Thus, a Wrangell-St. Elias National Park remained for future study.

For the next decade, Gruening's plans would be placed on hold. Throughout the 1940s and '50s, the idea of additional wilderness protection in the Glacial Lake Atna Valley languished. The lack of federal action, on the other hand, allowed for local residents to continue

[189] Bleakley, *Wrangell-St. Elias, 40.*
[190] Bleakley, *Wrangell-St. Elias,* 12.
[191] Bleakley, *Wrangell-St. Elias,* 12.

inhabiting and working along the Copper River for traditional purposes. The Glacial Lake Atna wilderness was dotted by the cabins of intrepid backcountry men who lived off the land.[192]

Clearly, the first Alaska lands acts were well-intentioned, but they did not necessarily improve ecology, nor did they account for the subsistence and cultural traditions within wilderness. Catton remembers that some game advocates, like Sheldon, "took a more sympathetic view of the white miner or Indian who killed game out of season."[193] Sheldon testified before a congressional committee approvingly: "When I was up there, if they hauled a breaker of the game law into Fairbanks, they would not get a judge or jury to convict him."[194] In most cases, poachers walked free. During the Alaska winter, people were quite literally sealed away from the outside world until break-up. Catton noted that at one point, there was a single beef distributor in Fairbanks who purchased his livestock each summer and transported it north by way of Skagway. By mid-winter or spring, the meat would be rancid. People needed to eat wild meat.

Furthermore, for Native peoples, in particular, the idea of hunting regulations was foreign and violated cultural mores and spiritual practices that ensure the well-being of the people. For example, within Tlingit culture, it is considered "presumptuous" to declare one's intention to hunt. "The tradition was that you just said, 'I'm going for a walk,' and as you went out the back door, you picked up your rifle and headed out. And then after you shot the bear, you buried the skull facing east."[195] Such respectful practices would ensure the success of future hunts. Early

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[192] Bleakley, *Wrangell-St. Elias,* 11, 12, 15.
[193] Catton, *Inhabited Wilderness,* 79.
[194] Ibid.
[195] In this example, Catton notes that Kodiak Island Natives hold cultural beliefs regarding the hunt and hunting: it is considered bad luck to declare one's intent to hunt a brown bear; See: Theodore Catton, *American Indians and National Forests* (Tucson: University of Arizona Press, 2016), 240.

Alaskan subsistence boards required the skull for measurement and record-keeping, making regulations challenging to enforce in rural places. "Then there was the case of a Tlingit hunter from Angoon," Catton continues. This hunter shot some twenty to thirty deer by himself. When the subsistence board fought to penalize his actions, the local community pointed out that such high harvests were not unusual in the subsistence economy. A village community of perhaps five hundred or more might have just a few hunters who would typically act as designated hunters for that entire village. After a massive fall hunt, the hunter would then distribute the meat among village households.[196]

Many early federal conservation efforts neglected to acknowledge the issue of hunting and fishing in National Parks entirely. Historian Frank Norris concedes that at this time, National Park Service land planners from outside the state were only "vaguely cognizant" of the subsistence lifestyle.[197] Alaska was an unfamiliar frontier, and early federal land bills reflected a lack of regional knowledge. In 1928, Congress prohibited all hunting in the McKinley area. In 1944, the Fish and Wildlife Service began patrolling Glacier Bay National Park waters west of Juneau, at National Park Service request, in order to halt seal hunting. The Park Service prohibited the use of "firearms, traps, seines, and nets" in the monument without a custodian's permission, a decision that Tlingit tribes and Bureau of Indian Affairs officers vehemently protested. The period of conservation that allowed for hunting, roughly between 1900 and 1930,

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[196] Catton, *American Indians,* 240; Catton, *Inhabited Wilderness,* 79.
In other Alaska Native cultures, even uttering the name of an animal one intended to hunt was considered taboo. In some cases the adjectives "harvest" or "take" are used colloquially in place of the word "kill" or "hunt" when one is talking about hunting an animal. See: Robbin La Vine and Garrett Zimpelman, "Subsistence Harvests and Uses of Wild Resources in Kenny Lake/Willow Creek, Gakona, McCarthy, and Chitina, Alaska, 2012," *ADF&G Division of Subsistence, Technical Paper,* no. 394 (2014): 86.

[197] Frank Norris, *Alaska Subsistence: A National Park Service Management History* (Anchorage: Alaska Support Office, National Park Service, U.S Department of the Interior, 2002), 230.

appeared to be in the rearview mirror as the government looked to create game preserves as the most critical conservation goal for Alaska. In the face of this increased regulation, in the Copper River country, locals clung to their hunting and trapping rights.[198]

In 1963, Secretary of the Interior Stewart Udall published a report entitled, "Wildlife Management in National Parks," which, from the outset, Catton notes contradicted the idea of work in National Parks and Wilderness areas. An advisory board of five biologists led by A. Starker Leopold, the son of Aldo Leopold and a professor of zoology, prepared Udall's "landmark" document, the Leopold Report, which provided the National Park Service with management recommendations. The report called for national parks in which animal and plant populations "[were to] be maintained, or where necessary recreated, as nearly as possible in the condition that prevailed when the area was first visited by the white men."[199] Leopold's campaign for re-creating wilderness ignored thousands of years of Native resource management. It, too, urged for the creation of wilderness areas where humans would no longer influence the land: human labor, hunting, fishing, inhabitation, or otherwise. The Leopold Report suggested that federal management would seek to make each National Park "represent a vignette of primitive America."[200] After the report was penned, Secretary Udall draftees new National Park Service policy that adhered closely to the Leopold Report. The Report's committee itself acknowledged that "the implications of this seemingly simple aspiration are stupendous," and yet regarded the report as a triumph.[201] A 1969 proposal of the Bureau of Outdoor Recreation advised the creation of a 10.5-million-acre "Wrangell Mountain Scenic Area," and suggested that

[198] Norris, *Alaska Subsistence*, 1-12, 230, 254-59.
[199] Catton, *Inhabited Wilderness,* 69.
[200] Ibid.
[201] Ibid.

the Bureau of Land Management take stewardship of it as it managed land for multiple use and permitted for resource development.[202] Nonetheless, the Copper River country's local tradition of working and living within wilderness made wilderness management a complicated task. As the next chapter will reveal, the effort to recreate primeval wilderness would prove to be fruitless and fraught with conflict.[203]

2.5 Conclusions

Overall, wilderness protection remains one of the greatest successes of conservation. The fight for Designated Wilderness and Wild and Scenic Rivers, free-flowing and wild, dominated twentieth century politics. As publicity surrounding Alaska's resources grew in the twentieth century, environmental groups were adamant about protecting the last American frontier. The political movement to protect wilderness suggested that "wilderness" was primitive, untouched, and wild.[204] The Wilderness Act of 1964 proposed that wilderness is uninhabited and a place where the imprint of work is not noticeable.[205] Stories from the Alaska frontier, especially those that reinforce a sense of romanticism or reiterate post-frontier ideology and project an image of pristine wilderness, are counterproductive to developing a holistic approach to wilderness management. Working and living (as opposed to worship or play) in the wilderness do not automatically transform it into non-wilderness. Richard White further points out that the modern environmental approach creates distrust among those who most obviously work in wilderness or

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[202] Bleakley, *Wrangell-St. Elias,* 14.
[203] Catton, *Inhabited Wilderness,* 69-71.
[204] James Morton Turner, *The Promise of Wilderness: American Environmental Politics Since 1964* (Seattle: University of Washington Press, 2012), 2-15.
[205] Wilderness Act

live in the wilderness and those who unwaveringly believe in the conservation of *pristine wilderness*.[206] The history of wilderness must address the transformation of environments in extractive ways and cannot exclude human history. After decades of resource management, wilderness managers did this, conceding that re-creating "vignettes" of American wilderness is not possible. Wilderness has been altered, has changed, and has been the place of labor since the beginning of human history.

In the late 1960s and throughout the '70s, Congress would consider a flurry of Alaska lands acts. The Department of the Interior and the State of Alaska worked together to decide on the allotment of Alaska lands. In the Copper River country, a series of complex legislative acts divided and redivided lands between State, Native, and federal claimants. The Glacial Lake Atna area, which through history had been contiguous, was subdivided by artificial legal boundaries. Environmentalists eagerness to protect this wilderness created friction within society. They pushed for the wholistic conservation of wilderness areas in the image of the Wilderness Act—one free from work, free of human inhabitation, and free of hunting. Local residents chafed at the regulations and individuals hunted in violation of the law without consequence. Not until the passage of the Alaska National Interest Lands Conservation Act (ANILCA) in 1980 would the issues of subsistence, hunting, fishing, access, and work, be addressed comprehensively.[207]

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[206] White, "Are You an Environmentalist?" 171.

[207] Alaska National Interest Lands Conservation Act (ANILCA) of December 2, 1980, U.S Public Law 95-23, 94 Stat. 2371 [hereafter cited as ANILCA].

3. The Federal Lands Period

3.1. The Campaign for Wilderness

This chapter focuses on two federally protected and administered wild areas, the legal and political history of Alaska's federal lands, and how two separate federal agencies and their environmental legislative missions manage one wilderness. Chapter One focused on the draining of Glacial Lake Atna; by regional geologists' best estimate, the lake burst its glacial dams some time around twelve thousand years ago and a subsequent period of post-glaciation and isostatic depression created the morainal kettle ponds of the Tangle Lakes in its wake. In Chapter Two, the boreal forest reclaimed the lake bottom; the forest grew thick across Lake Atna's margins from its furthermost shores inward across a vast, depressed valley. Hydrologic arms crossed the ancient lakebed and eroded a path toward the Gulf of Alaska. Today, the Gulkana River flows from the Tangle Lakes southward, where it joins the Gulkana's Middle Fork, West Fork, and then the Copper River. The Copper River, with its headwaters at the Copper Glacier near the towering Mount Wrangell, eventually empties into the Gulf of Alaska. The wilderness of Lake Atna (investigated here in Chapter Three) is roughly defined by the Glacial Lake Atna's ancient shoreline which spans ~150 miles in diameter and incorporates the lake's prehistoric margins and post-glacial rivers, bluffs, and boreal forest. More specifically, this wilderness is bound between Glacial Lake Atna's northern shore in the Tangle Lakes, which is located near milepost 20 on the Denali Highway, just south of Landmark Gap at milepost 25, and Lake Atna's eastern prehistoric shore, which runs across the Wrangell Mountain foothills parallel to milepost 127 on the Richardson Highway. While remaining contiguous in topography and geomorphology, and so similar in environment that plant and animal populations have migrated through it unhindered

throughout several epochs, today the administrative responsibility for this wilderness areas has been subdivided between two federal agencies. The Bureau of Land Management (BLM) has stewardship of the Tangle Lakes and the Gulkana River. The Copper River forms the western boundary of Wrangell-St. Elias National Park and Preserve inside of which the National Park Service (NPS) has stewardship of the Wrangell Mountains.

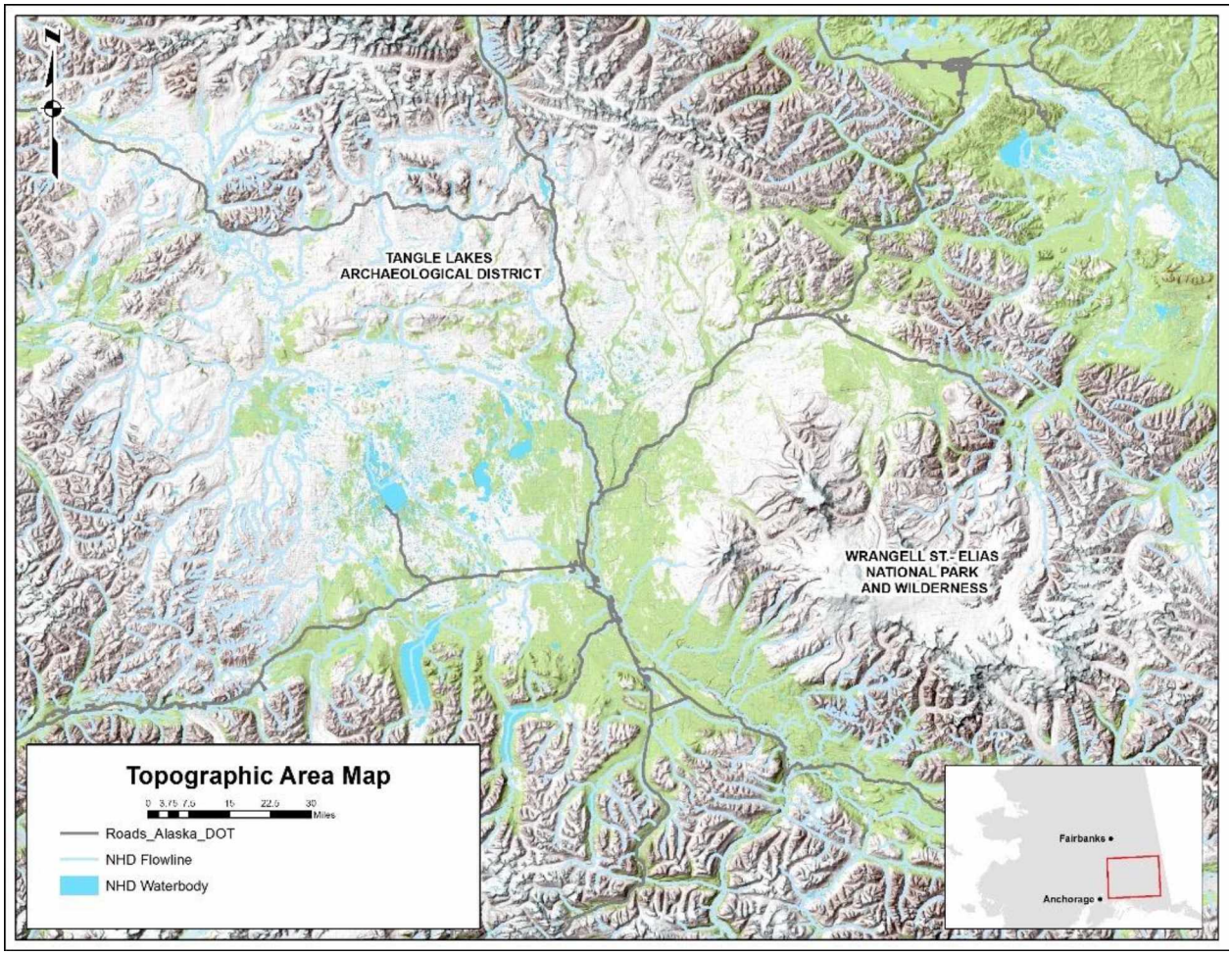

Figure 3.1 Topographic Area Map:
Topography of the Glacial Lake Atna wilderness area between the Tangle Lakes (north), north of the Gulkana River, and Wrangell-St. Elias NPP (east) in the Wrangell Mountain Range.

The federal wilderness policy system stems from the same conservation ethic outlined in Chapter Two, whose origins lay in the Alaska Frontier period, post-frontier ideologies, and romanticism. The Organic Act of 1916 bolstered the American political campaign for wilderness.

Administration of Alaska's three hundred and seventy-five million acres of land, which included location into federal, state, Native, and private hands, created myriad conflicts between those who lived and worked within eventual designated wilderness areas and others who wished to set aside unimpaired those same places for conservation. In 1980 Congress passed the Alaska National Interest Lands Conservation Act (ANILCA) (Public Law 96-487).[208] Congress further designated wilderness lands and administered Alaska's wild areas under the Department of the Interior by the Wilderness Act of 1964 (Public Law 16 U.S.C. 1131- 1136) and the Wild and Scenic Rivers Act of 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.).[209] Henceforth, wilderness fell into one or the other category. Wrangell-St. Elias National Park and Preserve manages approximately 9.1 million acres of legally designated Wilderness (per the Wilderness Act the land possess *wilderness* character); the BLM manages the Gulkana Wild and Scenic River (Wild and Scenic Rivers being un-dammed and possessing *wild* character). The federal government created these wilderness areas for conservation, striving for an ideal image of "pristine wilderness."

[208] ANILCA

[209] Wild and Scenic Rivers Act of October 2, 1968, 16 U.S.C § 1271-1287; Wilderness Act

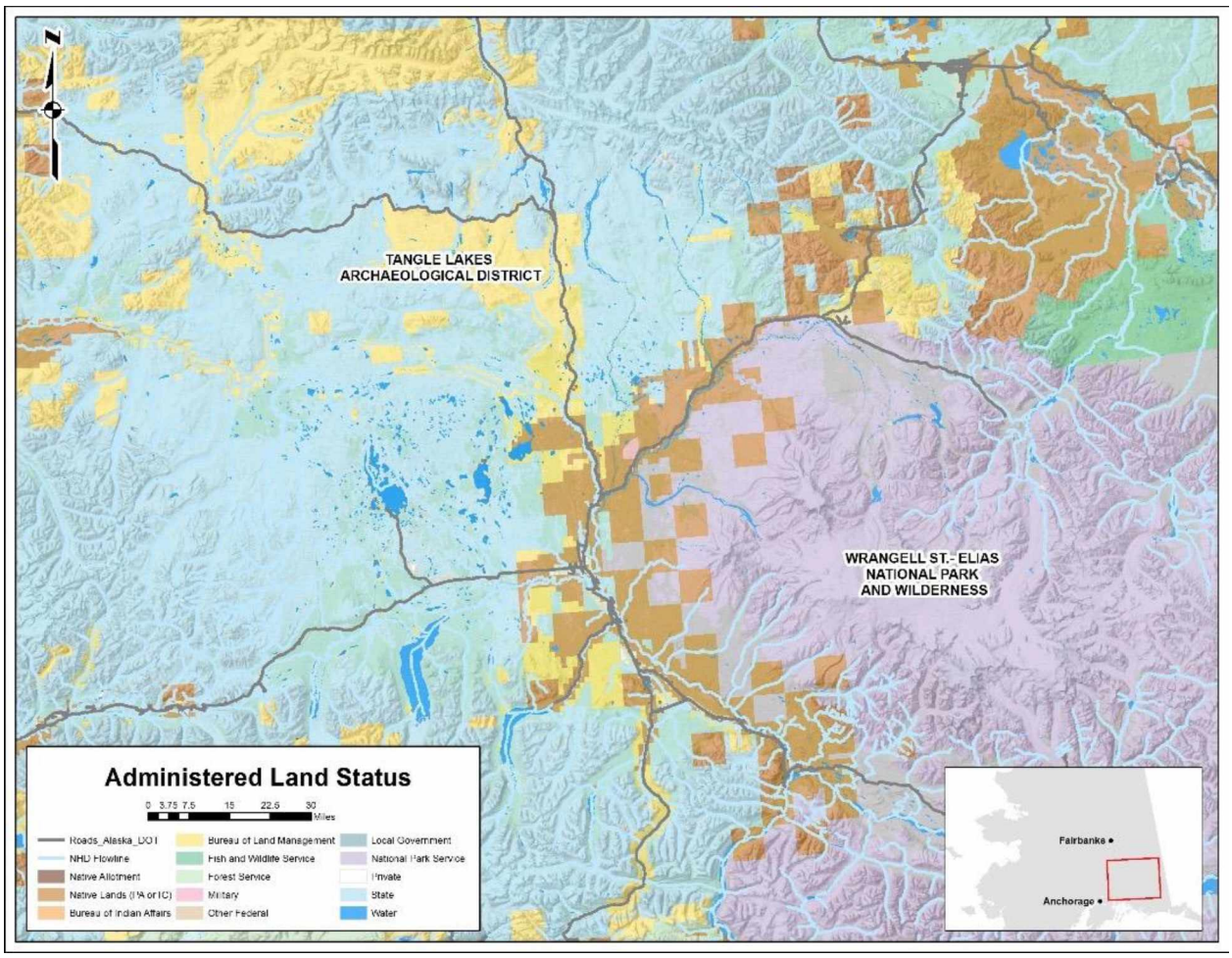

Figure 3.2 Administered Land Status Map:
The Administered Land Status in the Copper River Basin area.

Since the enactment of the Wilderness Act in 1964, the American conservation movement has maintain that the management of wilderness lands should reflect a "hands off" approach by which the administrators leave lands largely undisturbed and in their ostensibly pristine state. As James Morton Turner points out, the "increasing, deafening roar of civilization" necessitates the conservation of wilderness for its quiet and solitude, an ethos that has led regulators to those goals with a light touch.[210] Turner further notes that wilderness management is intended to promote the "best interest" of the public, an admittedly malleable, contested, and

[210] Turner, *The Promise of Wilderness*, 15.

historically contingent concept. Wilderness managers are tasked with meeting wilderness objectives using the minimum tools and force. These tenets are fundamentally the merits of conservation—and quite literally require land be put aside, unimpaired. Indeed, the wilderness system has provided us with free-flowing rivers, road-less areas, and places free from trash, infrastructure, and noise pollution. Praising the conservation effort in Alaska, President Jimmy Carter remarked that "[n]ever before have we seized the opportunity to preserve so much of America's natural and cultural heritage on so grand a scale" as in the 49th state.[211] Deborah Williams, of the Alaska Conservation Foundation, expressed her enthusiasm for an Alaska Lands Act saying that ANILCA represents "the single most significant piece of land conservation legislation ever passed in the history of mankind."[212]

However, in Alaska, the lengthy fight for wilderness chafed against the local population's assumptions about continued use of the land. Designated wilderness areas in the Glacial Lake Atna valley set aside land long *inhabited* by humans. The creation of federal lands in the area set up a system of management that dispossessed local residents of land they considered to be shared. Lifelong Alaskan Ed Rasmuson gave voice to the dispossessed when he notes that under ANILCA the state became "kind of a whipping boy up here" and that despite resisting the conservation movement, "there was too much overwhelming support to lock away a lot of Alaska, and that's what they did."[213] As the Alaska Lands Act unfolded, it radically changed the ways in which local people lived. In order to understand how legal wilderness and federal lands policy affects local residents—those who live and work in this legally designated wilderness—this chapter will examine how the Alaska Lands Act came to be and how the National Park

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[211] U.S. Department of the Interior, National Park Service, *Alaska's Wild Legacy,* directed by Brian Jones (Alaska: Anchorage Alaska Public Lands Information Center, n.d.), DVD.
[212] Ibid.
[213] Ibid.

Service and Bureau of Land Management have differently interpreted wilderness allowances and access.

This chapter associates *work* in wilderness with hunting, fishing, and access to those activities. In Alaska today, hunting and fishing remain traditional activities for many. Rural residents still work in the wilderness areas of Wrangell-St. Elias National Park and Preserve (NPP) and inside the Gulkana River's wild and scenic watershed. Federal management decisions regarding access, opening a trail system, formulating motorized access regulations, and enacting a permitting system for hunting, for example, exemplify just how different Alaska and Alaskans are from the contiguous forty-eight states. In 1980 one local user objected to the Tangle Lakes management plan by complaining that:

> So you [the government] conclude: leave some trails open, they'll be happy. Not so, gentlemen. Because when the moose hunter, who is trying his hardest to comply with the intent of your regulations, sees that bull moose standing over there 600 yards off the trails, he's going to go over and take a poke at filling the freezer. You are dreaming if you think you can regulate him out of going cross country to pick up that moose. You are foolish if you try.[214]

This user, perhaps writing from his own hunting expense in the Tangle Lakes, echoed a widespread mindset throughout the state. When game was abundant, hunters would hunt. When game was 600 yards off of the approved right-of-way, as this user suggests, users were likely to illegally go cross-country to retrieve game. Since the early 1910s, subsistence boards found that regulating hunting— including setting bag limits, limiting open seasons, and limiting game retrieval methods—was an arduous task especially when compared to regulations in the Lower

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[214] U.S Department of the Interior, Bureau of Land Management, Alaska, *Tangle Lakes Archeological District Proposed Off-road Vehicle Designation, Preliminary Case Report B1; Environmental Assessment (EA) Record: Environmental Impact Statement* (Alaska, 1980), 198, https://books.google.com/books?id=0hgxAQAAMAAJ&printsec=frontcover&source=gbs_atb#v=onepage&q&f=false.

48, which were smaller scale and overall easier to enforce. In the remote corners of Alaska, the complete halt of hunting and fishing on federal lands would not work. With ANILCA, the federal government revised the traditional concept of wilderness and was an attempt by the federal government, in the words of historian G. Frank Willis, to "do things right the first time" in the 49th state.[215] Title VIII of ANILCA upholds the tradition of subsistence activities within federally protected lands. Such allowances include hunting, fishing, trapping, and various modes of motor access. In the Lake Atna wilderness, however, the NPS and BLM have interpreted subsistence law and access clauses with unequal force. This chapter will thus further revisit historian William Cronon's adage mentioned in Chapter Two that the time has come to "re-think" wilderness and explore what wilderness management means under both NPS and BLM policy.[216] Chapter Three will also "re-think" wilderness in Alaska as a place of work and inhabitation. This chapter concludes that Title VIII allowances have changed how we think about various forms of work: those appropriate in wilderness—archaic work, like hiking, rafting, camping, recreating—and the "inappropriate" work that uses machines, especially to hunt or fish.

From the time of Euro-American contact in the 18th century, Alaska has been populated by Native and non-Native trappers, commercial fishers, hunters, and other people working in natural resource extraction such as miners and loggers. Despite the tradition of a mixed-market economy, there was no road-map as to how to incorporate Alaska into the federal lands system. Alaska was unlike the American West in that "captured" federal land management policies—or U.S federal land agencies being "captured" by the very interest groups it was supposed to

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[215] G. Frank Willis, *"Do Things Right the First Time": An Administrative History of the National Park Service and the Alaska National Interest Lands Conservation Act of 1980* (U.S. Department of the Interior, National Park Service, September 1985), 2, http://www.cr.nps.gov/history/online_books/williss/adhi.htm.
[216] Cronon, "The Trouble with Wilderness," 7.

regulate, such as the General Mining Act of 1872, privatization of public lands for resource use; the Taylor Grazing Act 1934, federal lands where grazing interests controlled policy; the 1950s co-opting of forests—had not yet taken hold.[217] At the time of Alaska statehood, less than one percent of Alaska land was held in conservational private ownership, and small populations of transient workers used public lands at will, especially in cases of small-scale personal mining and logging. Across the American West, on the other hand, in some cases private interests controlled federal law. For example, in response to requests from Western ranchers, Congress passed the Taylor Grazing Act of 1934 which established grazing districts on vacant, unappropriated lands in the public domain. Essentially, without large parcels of private land, Alaskans would have to rely on public lands in order to fulfill their resource needs, yet due to a bitter history with captured land management policy, the federal government was at first hesitant to allow for such extractive resource use. In 1955, in order to flesh out the such questions regarding resources use on public Alaska lands, delegates to the Alaska Constitutional Convention assembled and drafted an intentionally brief, general document. Article VIII of the Alaska State Constitution addresses natural resources and land use; while it provided for state parks and protected areas, it primarily ensured that resources are to be held in public trust for maximum use consistent with the public interest and common access.[218] While the Constitution at first appeared to ensure public interest, it broadly left authority to future state legislatures to settle issues in land use planning. This decision would complicate federal lands policy for the upcoming decades.

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[217] General Mining Act of May 10, 1872, 30 U.S C. §§ 22-42, 17 Stat. 91-96; Taylor Grazing Act of June 18, 1934, 43 U.S.C. ch. 8A § 315 et seq, 48 Stat. 1269.
[218] Alaska Constitution of 1956, art. VIII, § 3.

The December 18, 1971 Alaska Native Claims Settlement Act (ANCSA— Public Law 92 203, (85 Stat. 688)) settled the longstanding claims of Alaska Natives to the lands they had traditionally occupied and used.[219] The act primarily describes the procedure by which to finalize claims under Alaska Native land title for roughly 44 million acres of land and $962.5 million from the federal treasury and additional oil revenue sharing. Thus, it would be impossible to mention the passage of ANCSA without mentioning the oil discovery on at Prudhoe Bay on Alaska's North Slope, however, for ANCSA was drafted in part as an antecedent to large-scale mineral extraction. This action, an action in favor of private interests on public lands, held a striking resemblance to the captured federal policy tradition such as the Taylor Grazing Act. The forceful arm of 1968 ARCO, British Petroleum, and Humble Oil's unincorporated Trans-Alaska Pipeline Service company (TAPS) used the same tactics to gather public resources as did western ranchers for grazing lands. The TAPS company solicited the United States Department of the Interior for access rights to the oil right reserves in Prudhoe Bay. Early feasibility studies suggested an overland trans-Alaska pipeline to transport oil to the Port of Valdez, however, in some stretches of the eight-hundred-mile pipeline, however, thinning soils, uneven ground, and permafrost prompted TAPS engineers to petition the U.S. House and Senate to approve a sub-surface right-of-way. The pipeline project team asked for authorization of a more significant land right-of-way than the Mineral Leasing Act of 1920 allowed. As early as 1969, TAPS thus set about obtaining waivers directly from Native villages to sanction the proposed right-of-way and sub-surface rights; such waivers were a direct by-pass around the development freeze imposed in 1966 by the former Secretary of the Interior Stewart Udall. The political climate of the 1970s, however, was radically different from the '30s, during which captured policy dominated land

[219] Alaska Native Claims Settlement Act of December 18, 1971, 43 U.S.C. 1601, 85 Stat. 688.

politics. This time around, in Alaska, environmental groups, Native groups, and conservation organizations strongly voiced their opposition to the project that the federal government halted TAPS construction and engaged in negotiations to settle Alaska Native land claims.[220] A democrat presidency, headed by President Jimmy Carter, was forcefully opposed to mineral extraction in wetlands and in scenic areas across the state. ANSCA's passage created a window of opportunity for federal action on an Alaska lands act to address specific burning conservations questions that arose in the intervening years regarding the rest of the territory: how to provide for allotment of public interest lands while also protecting pristine wilderness; how to address subsistence rights without succumbing to captured federal policy; and which governing body would have authority over Alaska's land and water resources.

ANCSA's Sections 17 (d)(1) and 17 (d)(2) directed that Secretary of the Interior Rogers Morton might withdraw any lands he deemed necessary to ensure public interest. In 1972, Secretary Morton forwarded proposals for over 120 million acres of selected lands to Congress under 17 (d)(1).[221] Problematically, the 17(d)(1) land legislation is worded vaguely, promising to "to insure that the public interest in these lands in properly protected".[222] However, the so-called Bible Amendment, or Section 17(d)(2) of ANSCA, drew the general public's attention. It directed Secretary Morton to withdraw upwards of eighty million acres of land as public domain and make them available for designation as National Parks and Preserves, Wildlife Refuges, Forests, and Wild and Scenic Rivers. Historian Theodore Catton noted that Alan Bible, senator from Nevada and chairman of the Subcommittee on National Parks and Recreation, was inspired to protect Alaska wilderness after a field-trip he took to the state in the company of an NPS

[220] Catton, *Inhabited Wilderness,* 50, 79.
[221] Alaska Native Claims Settlement Act of December 18, 1971, 43 U.S.C. 1601, 85 Stat. 688.
[222] Turner, *The Promise of Wilderness*, 12-15.

"crack team of land planners" and under the guide of John M. Kauffman.[223] Over the course of a month, Bible immersed himself in Alaska's great outdoors. He traveled to Alaska's most scenic destinations—the proposed Gates of the Arctic National Park, Mount McKinley National Park, the Katmai area, and historic downtown Skagway. Guided by the Sierra Club and the Wilderness Society, Bible earmarked much of the state under the "D-2" amendment for conservation purposes. For seven years following ANSCA, D-2 lands were ineligible for selection by the State of Alaska or Native regional corporations formed by ANSCA and thus remained in limbo awaiting the passage of an Alaska Lands Act.[224]

In the following ten years, federal negotiators put forward a slew of unsuccessful land bills in hopes of passing an Alaska Lands Act. The federal government was met with public resistance at every turn. In some senses, the conservation movement was accused of "seizing onto the coattails" of the ANCSA; however, Catton notes that "this was inaccurate," and the conservation movement had its own impetus to protect Alaska wilderness.[225] Conservation groups had spent years preceding ANCSA preparing recommendations for the Department of the Interior. Catton notes that the Alaska Coalition (a group of conservation-minded individuals) "showed itself to be well-prepared," and in the weeks preceding the vote on ANSCA brought before members of Congress "maps and acreages" from the Park Service and the Fish and Wildlife Service suitable for inclusion in a lands act.[226]

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[223] Catton remarks that this trip was crucial in securing Bible's support for conservation lands in Alaska and that one member of the field trip, George B. Hartzog, claimed that the original intent of the trip was to earmark most of the Alaska national interest lands for inclusion to the park system (as opposed to being included under other management systems such as BLM lands). Catton further notes, however, that G. Frank Willis was unable to find any evidence of this. See: Catton, *Inhabited Wilderness,* 196; Willis, *"Do Things Right the First Time,"* 2-5.
[224] Catton, *Inhabited Wilderness,* 196- 198.
[225] Catton, *Inhabited Wilderness,* 196.
[226] Catton, *Inhabited Wilderness,* 196-197.

James Morton Turner explains that during the burgeoning twentieth-century environmental movement, conservation efforts across the nation tilted toward preserving "large ecosystems" as their primary goal.[227] Catton writes that the "romantic impulse" to preserve America's past in Alaska gained an "irresistible" national following in the mid-1970s.[228] Grassroots environmental movements such as the Sierra Club, founded in 1892 by John Muir, and Earth First! in 1980, spread across the country, advocating for the holistic protection of wild places. Public support for protecting wilderness pushed forward. With the passage of the Wilderness Act of 1964, wilderness became a sacred place. The Act defines wilderness as those areas where the earth and its community of life are untrammeled, where man himself is a visitor who does not remain. The Act further clarifies that wilderness is an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected as to preserve its natural conditions and which:

> (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.[229]

Thus, the Act clarifies that wilderness was to be devoid of *work* and *uninhabited.*[230]

The perception of wilderness would not hold, however. By the late twentieth century, writes Catton, "ironically, the primitivists' critique of humankind and nature had been all but demolished by anthropologists and ecologists."[231] Modern ecology infers that Native cultures

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[227] Turner, *The Promise of Wilderness*, 34.
[228] Catton, *Inhabited Wilderness,* 69.
[229] Wilderness Act
[230] Turner, *The Promise of Wilderness*, 34; Wilderness Act.
[231] Catton, *Inhabited Wilderness,* 217.

have never been static nor have the lands they inhabited been pristine and uninfluenced by cultural change. The National Park Service tradition of preserving the "remnants of once-continental wilderness," or in the words of the Leopold Report, the "vignettes of primitive America," was no longer a viable management scheme. Despite that fact, wilderness management continued to treat wilderness as uninhabited and primitive for the next several decades, despite the paradox that it presented.[232]

Amid the clamor to establish wilderness, the State of Alaska acknowledged that it needed to address the issue of subsistence in lands that would become protected under the pending federal lands act. Historically, preservationists dealt with what Catton refers to as the "problem of resident peoples" in parklands in one of two ways: removal or regulation.[233] Neither option appealed to most Alaskans as those lands were intended to be in public trust for common access. At this time, the U.S Senate Committee on Energy and Natural Resources included Senator Ted Stevens and Senator Mike Gravel in lands act negations to better voice Alaskans' concerns. The 1977 lands bill that emerged from the Senate Committee was considerably weaker than the Park Service had hoped. The bill called for small parks/monuments, large preserve areas that would allow hunting and fishing, and the creation of several national recreation areas that would be open to multiple-use. The next year, President Carter's land claims proclamation established seventeen national monuments covering over 55 million acres of land and legitimized subsistence activities on an additional more than 40 million acres of park land. The legislation was remarkably similar to the subsistence bill the State of Alaska had envisioned. Historian Frank Norris, in *Alaska Subsistence: A National Park Service Management History* notes that "it seems remarkable, at least in retrospect, that the subsistence-related recommendations of avowed

[232] Catton, *Inhabited Wilderness,* 217- 18.
[233] Catton, *Inhabited Wilderness,* 217.

conservationists… would be so similar to those of Alaska's two senators," who crafted the Senate committee bill.[234] The political campaign for wilderness, however, urged for the finalization of a more stringent lands bill.[235]

President Jimmy Carter signed the Alaska National Interest Lands Conservation Act (ANILCA; Pub. L. 96-487; 16 U.S.C 410hh- 410hh5; 3101-3233) in December 1980. ANILCA set aside a total of 157 million acres for preservation and protection, including the addition of 9.1 million acres to the National Wilderness Preservation System. It further called for the creation of ten National Parks and Preserves, two National Monuments, nine National Wildlife Refuges, two National Conservation Areas, twenty-five Wild and Scenic Rivers, and expanded many of the parks, forests, and refuges already in existence in Alaska. Conservation measures protected about forty percent of Alaska's total land mass. Deborah Williams, Executive Director of the Alaska Conservation Foundation, noted after the passage of ANILCA that "fundamentally, the great balance in Alaska is that the State of Alaska and Alaska Native corporations have about 150 million acres of land for economic development, and the American people, when all is said and done, have about 150 million acres of land." Williams concluded, "that's a good balance."[236]

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[234] Norris, *Alaska Subsistence*, 72.

[235] Norris, *Alaska Subsistence*, 71-79.

[236] The state of Alaska has about 375 million acres of total land mass. ANILCA set aside roughly 150 million acres of land for conservation purposes; however, there are approximately 222 million acres of federal land total in Alaska— this acreage includes conservation lands set aside by ANILCA as well as military reservations and the North Slope National Petroleum Reserve (NPR-A), managed by the BLM. In addition, roughly 44 million acres of land are under Native Title and the State of Alaska owns 101 million acres of land under the Alaska Statehood Act. Less than 1 percent of Alaska is held in conventional private ownership. See: U.S. Department of the Interior, National Park Service, *Alaska's Wild Legacy,* directed by Brain Jones (Alaska: Anchorage Alaska Public Lands Information Center, n.d.), DVD; Alaska National Interest Lands Conservation Act (ANILCA) of December 2, 1980, U.S Public Law 95-23, 94 Stat. 2371.

3.2. Drawing Boundaries

Under ANILCA Section 203, the Secretary of the Interior, acting through the National Park Service, was set to administer Wrangell-St. Elias National NPP as a new park unit in the National Park System according to the provisions of the National Park Service Organic Act of 1916 (Organic Act) (16 U.S. C 1 *et seq.*). Wrangell-St. Elias NPP includes over 13.1 million acres of land, an expanse that exceeds the size of Yellowstone National Park by a factor of six.[237] The park extends from southeastern Mount St. Elias, bisecting some of the highest peaks in the United States and Canada, to the Malaspina forelands, grand glacial fjords along the Gulf of Alaska, to the interior valleys of the Wrangell Mountains, and it envelopes the eastern tail-end of the Alaska Range. It incorporates hundreds of miles of the Glacial Lake Atna shoreline west of the Wrangell Range between milepost 80 on the Richardson Highway and milepost 60 on the Tok Cutoff Road. Under the 1916 Organic Act, Congress granted the NPS the authority to regulate "the use of areas under its jurisdiction, provided that the associated impacts leave the scenery and the natural and historic objects and the wildlife [in these areas] unimpaired for the enjoyment of future generations."[238]

Further, Section 201(9) of ANILCA (16 U.SC. 410hh(9)) directed the National Park Service that Wrangell-St. Elias NPP be managed:

> (1) to maintain unimpaired the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes and streams, valleys, and coastal landscapes in their natural state; (2) to protect habitat for and populations of fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall's sheep [*sic.*], moose, wolves, trumpeter swans and other waterfowl, and marine mammals; (3) to provide for recreational opportunities,

[237] Norris, *Crown Jewel of the North,* 14.
[238] Organic Act

including reasonable access for mountain climbing, mountaineering, and other Wilderness recreational activities.[239]

Section 3 of the Organic Act authorized the Secretary of the Interior to "make and publish such rules and regulations as he may deem necessary or proper for the use and management of the parks."[240] Thus the tradition of regulating and patrolling Alaska park land began.

In the same year, the Bureau of Land Management assumed administrative management of seventy million acres of Alaska land. BLM lands are administered under the Federal Land Policy and Management Act of 1976, or FLIPMA (U.S. Public Law 94-579). The BLM has been managing land in Alaska since the passage of the Organic Act; however, FLIPMA legally details the agency's core mission as a careful balance of multiple-uses with sustained yield. Multiple use is a form of natural resource management where use of land is for more than one purpose, for example, grazing of livestock, recreation and timber production. Natural scientists closely monitor and approve of multiple use in order to meet the standards of sustain yield—as to protect the ecosystem from over-use or over-harvest. The term also applied to the use of associated water bodies and rivers for recreational purposes such as fishing and rafting. The Tangle Lakes exist today as a chain of several interconnected lakes located on the southern periphery of the Alaska Range, open to multiple use. The Denali Highway runs roughly east-west from the junctions of Paxson to Cantwell, bisecting the Tangle Lakes north to south at roughly milepost 22. The Tangle Lakes area has remained open as public lands in a manner that is far less restrictive than the management strategy employed by the National Park Service. Owing to their

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[239] ANILCA; U.S. Department of the Interior, National Park Service, Alaska, *Draft Environmental Impact Statement Nabesna Off-Road Vehicle Management Plan, Wrangell-St. Elias National Park and Preserve, Alaska* (Alaska, July 2010), 3-4, https://books.google.com/books?id=mEY3AQAAMAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false.

[240] Organic Act

mission for multiple use and sustainable yield, the BLM is better able to commingle cultural and ecological resource management. The agency allowed hunting, fishing, trapping, and mining prior to the passage of ANILCA. Further, nomination to the National Register of Historic Places in 1971 still allowed for the trail system to be left open to motorized traffic and maintained hunting access.[241]

By 1980, the Copper River Basin was an active, populated area in Alaska. In the time since the frontier period, various locals took up residence throughout the valley. A surge of workers came to the area in the mid-1970s to construct the Alyeska Pipeline, which ran through the basin. People settled in small communities from Paxson in the Tangle Lakes area, to other rural areas such as Gakona, Chistochina, Slana, and McCarthy. Following the tradition of a mixed-market economy, residents of most of these communities harvested firewood, hunted and fished, collected plants, and generally worked out their backdoors.

Subsistence lifestyles have remained an essential backbone to rural Alaska life. On the shore of ancient Lake Atna, all humans practiced subsistence lifestyles both prehistorically and during the frontier period. In 1998, despite the wide dissemination of commercial goods throughout even rural Alaska, between 92 and 100 percent of surveyed rural households state-wide used wild fish, and between 75 and 98 percent of households harvested fish themselves.[242] Since 2000, further studies by the Alaska Department of Fish and Game (ADF&G) recorded high participation rates of wild food harvest, a diversity of foods, and a continued reliance on wild resources for all Copper Basin communities. In 2012, an estimated 97 percent of residents in each Glacial Lake Atna community (McCarthy, Chitina, Kenny Lake/Willow, Gakona)

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[241] Federal Land Policy and Management Act (FLPMA) of 1976, U.S Public Law 94-579, 90 Stat. 2743.
[242] Thomas F. Thorton, "Alaska Native Subsistence: A Matter of Cultural Survival," *Cultural Survival Quarterly* 22.3 (September 1998): 1. https://www.culturalsurvival.org/publications/cultural-survival-quarterly/alaska-native-subsistence-matter-cultural-survival.

exhibited at least some use of wild resources (See: Figure 2). During the 2012 study year, ADF&G reported that households in Gakona, a small community of about seventy households situated directly between the Wrangell Mountains to the east and the Gulkana River two miles to the west, harvested an average of eight kinds of resources and used an average of eleven kinds of resources. In total, 86 percent of all residents gathered plants or berries, 74 percent participated in fishing or processing fish, and 49 percent hunted for large animals or processed large animals. In 1982, the Gakona community harvested (per capita) over 200 pounds of subsistence foods (measured in useable weight, i.e. the meat from a moose not including the carcass, innards, or the non-useable parts). In 2012, ADF&G recorded a number that remained relatively consistent at ~175 pounds per capita. In the same year, the state agency reported that under 25 percent of Gakona residents relied exclusively on firewood for heating with over 75 percent utilizing wood heating in supplement to other heat sources. The chainsaw, essential for firewood collection, remained the most common subsistence tool between 1982 and 2012. Hunting, fishing, foraging, and firewood collecting are hard, physical jobs. As discussed in Chapter One, one can measure *work* based on the physicality of subsistence tasks: caloric expenditure, time, and kinetic movement. Chapter One also concluded that rural people regard the wilderness as a place one can live in, subsist from, and work in. Wildernesses are places humans might destroy or alter as a condition of working and living.[243]

While the rhetoric of modern wilderness management suggests that wild areas are "pristine" and devoid of human influence, the word management itself implies that humans are changing natural processes. In the early stages of intensive resource management, wilderness

[243] In most study communities (Gakona, Chitina, Kenny Lake/ Willow), the per capita harvest of wild resources remained high over time (between the mid-1980s and 2014); See: La Vine and Zimpelman, "Subsistence Harvests," 1-5, 41, 86, 131-35.

managers set a precedent of altering and controlling natural processes. For example, foresters with the Bureau of Land Management might change the number, size, and distribution of timber. They may also call for prescribed burning or fire-wising of certain areas. Yet, environmental histories conceptualize wilderness as an area free from influence. Roderick Nash notes that part of the "emergent appeal of the term wilderness stewardship in lieu of management is to soften the implications."[244] However, management does not necessarily require commanding activities, nor is stewardship free from them. Both wilderness management and stewardship control visitor use/overuse, draw wilderness boundaries, dispatch wilderness patrols, monitor hunting and fishing activities, and perform facility maintenance, including the construction of trail systems, signage, and administrative buildings.[245]

Not surprisingly, rural Americans often object to restrictive environmental policies view as restrictive regarding the natural resources that have been a central component of frontier life. The land use debates of the statehood era demonstrate that users of Alaska land have consistently resisted fish and game laws on federal lands—even under the guise of stewardship—and in fact, they might not have wanted federal lands at all. Many believed that incorporating public lands into parks or reserves trampled their rights. *Public interest* was, for many, already satisfied by the Constitution's equal access clause. With the passage of ANILCA, communities in the Copper Basin were suddenly thrust under the shadow of vast federally protected wilderness areas: Bureau of Land Management lands to the northwest and National Park Service lands to the east. Management decisions made in Mount McKinley National Park years prior also weighed heavily on the public's minds. Nelson Frank, fearful that hunting activities would be prohibited in wilderness areas, testified before the Alaska Native Review Commission in favor of a

[244] Nash, *Wilderness and the American Mind*, 24.
[245] Nash, *Wilderness and the American Mind*, 24-30.

subsistence bill saying that while "subsistence living [is] a marginal way of life to most… [it] was not only a way of life but also a life-enriching process."[246] According to Catton, there would have to be some sort of melding of natural resource and cultural preservation—some sort of formal legislation that would satisfy the goals of the wilderness movement while at the same time making pragmatic allowances for ecological and cultural change. In the meantime, the wilderness movement "made for a perilously uncertain basis of cooperation," writes Catton, "between preservationists and resident peoples."[247]

Initially, the National Park Service and Bureau of Land Management officers had trouble implementing ANILCA laws. Much of the early post-ANILCA years were spent hiring staff, building rudimentary federal offices, and establishing a minimum federal presence in rural areas. At first, officials were quick to compromise with Alaskans' interests. Relaxed interim provisions opened parks and national monuments to subsistence hunting, fishing, trapping, and the use of aircraft. Frank Norris notes that federal agents delayed enacting the provisions of ANILCA sections 806 (federal monitoring), 807 (judicial enforcement), 810 (impacts on land-use decisions), and 812 (research). In one instance, NPS officer Robert Peterson allowed for trapping in one park unit for the remainder of the 1978–79 trapping season as the season was already underway. For a brief period, the Park Service even deleted a system of residence zones and subsistence permits on the national preserves. In addition, local residents who used cabins on NPS lands were allowed to continue that use, at least for the time being. Norris remarks that "those who used cabins built before March 25, 1974 could obtain a renewable five-year permit, while cabins built after that date were eligible for only a non-renewable, one-year permit."[248]

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[246] Thorton, "Alaska Native Subsistence," 1.
[247] Catton, *Inhabited Wilderness,* 217.
[248] Norris, *Alaska Subsistence*, 89.

Despite these allowances, animosity toward the federal presence that had been festering for decades did not abate. Several rural Alaska communities protested the creation of federal lands. Congressman Don Young was a vocal critic of ANILCA and asked his fellow Alaskans to stop giving any form of aid to federal officials. Young said, "[W]e've got to do something positive and you can call it civil disobedience."[249]

Protestations occurred around the state. The communities of Glennallen and Eagle produced official proclamations stating their communities would not support park officials, not enforce park regulations, and would shelter any individual who broke the regulations. In July 1979, NPS Rangers in Wrangell-St. Elias, during the period it was National Monument, heard rumors that locals planned to sabotage their park airplane; indeed, six weeks later, a fire engulfed the NPS Cessna parked outside of Tazlina Glacier Lodge. The following year, Don Horrell's Tazlina general store hung a sign in the window that read: "We reserve the right to refuse service to anyone. Due to our beliefs in freedom we prefer not to serve the National Park Service."[250]

Regarding BLM lands near the Tangle Lakes, Alaska resident Randy M. Warwick submitted a handwritten note during a March 1980 BLM public comment period regarding alternatives on Off-Road Vehicle use in federal lands that read: "I believe the government is over-reacting to the sniveling of a few educated idiots. These people have a piece of paper on the wall that says they're smart, but the discrepancies that were brought out during the Fairbanks meeting lead me to doubt their credibility.... We don't need any new land restrictions in Alaska."[251]

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[249] Bleakley, *Wrangell-St. Elias,* 39; Norris, *Alaska Subsistence*, 88-89, 92, 94.
[250] Bleakley, *Wrangell-St. Elias,* 40-41, 43.
[251] U.S. Department of the Interior, Bureau of Land Management, Alaska, *Tangle Lakes Environmental Assessment,* 215 [emphasis in original].

Within the wilderness boundaries of the new conservation units, tensions rose even higher. Local people's livelihoods, homes, and lifestyles were changing. In the spring thaw of 1985, for example, Doug Vaden's homestead on North Fork Island was flooded by shifting water channels in the White River. When Vaden attempted to divert water upstream, the Park Service ordered him to halt activities and the river washed out several of his buildings. National Park Historian Geoffrey T. Bleakley notes that the park's "slow but steady efforts to control often renewed controversy."[252] Bleakley writes that Terry Overly, an inholder in the Wrangell mining town of Chisana, was obstinate about the troubles the park brought to his life, stating that "although unwilling to identify any specific regulation that significantly hurt him, Overly claimed that his freedom has been 'gradually eroded' by the National Park Service's presence."[253] Over the years, Overly filed numerous complaints with the park office including an objection to the trespass cabin permitting system, an argument against the limits on livestock grazing and the restrictions of motorized use, and a rejection of guide fees based on gross revenue. McCarthy-area pilot and hunting guide Kelly Bay reported he had lost about a quarter of his income after the park outlawed hunting in his choice hunting grounds. According to Bleakly, Bay conceded that "the park's impact was mostly psychological. It is the idea of living with fairly strict rules compared with what we had before."[254]

[252] Bleakley, *Wrangell-St. Elias,* 42.
[253] Ibid.
[254] Bleakley, *Wrangell-St. Elias,* 40-44.

3.3. ANILCA Title VIII and Work

To address Alaskan's concerns, Title VIII of ANILCA provided allowances for hunting, fishing, cutting firewood and, essentially, for *work* in wilderness. According to Catton, Title VIII was an attempt by the National Park Service to rectify the mandate that wilderness is "uninhabited."[255] Title VIII addresses subsistence activities, making subsistence legal in all but one of the park units (some 43 million of the 43.6 million total National Park acreage). Sections 811, 1110, 1111, 1310, 1315, and 1316 allow for the harvesting and preparation of resources for direct consumption.[256]

Many individual users saw Title VIII subsistence allowances not as an inroad to reimagining the National Park idea but instead as a justification to continue to hunt in wilderness. According to Catton, Alaska's new wilderness areas "harkened back to one of the earliest antecedents of the national park idea."[257] In Yosemite National Park, Teddy Roosevelt-era "Rangers" hunted by horseback and cowboys herded wild mustangs. Humans and animals shared an intimate relationship. Nearly every administrative history of the National Park Service recounts the story of the famed American West artist George Catlin, who, in 1841, became concerned by the closure of the western frontier.[258] Catlin mourned the loss of a frontier wilderness where the subjects of his paintings, the Plains Indians of the upper Missouri River, wild horses, buffalo, and other animals, lived together, rough and tumble. Catlin observed that the frontier should be set aside "by some great protecting policy of government… in a

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[255] Catton, *Inhabited Wilderness,* 5.
[256] ANILCA
[257] Catton, *Inhabited Wilderness,* 4.
[258] Catton, *Inhabited Wilderness,* 4; Nash, *Wilderness and the American Mind*, 100-101; Norris, *Alaska Subsistence*, 16-17.

magnificent park… containing man and beast, in all the wild and freshness of their nature's beauty!"[259] What Catlin had in mind was infeasible, however; Catton notes that "the artist wanted to freeze the Plains Indian culture in time, as though capturing it on a canvas."[260] Indeed, Catlin wrote that "preserved in their pristine beauty and wildness… [is] the native Indian in his classic attire, galloping his wild horse, with sinewy bow, and shield and lance, among the fleeting herds of elks and buffalos. What a beautiful and thrilling specimen…" or vignette, of frontier America![261]

ANILCA set a standard for federal law to allow for "customary" and "traditional" land uses in wilderness. The term subsistence has been a source of contention among conservation groups. Norris observed that "their [the federal government's] initial definition of subsistence, according to one early planner, was 'timber and game for local use'" only.[262] After the passage of Title VIII, the definition of subsistence expanded to encompass hunting, fishing, and gathering activities in legally designated wilderness as well as providing for access to those activities. The NPS had to revise legislation order to allow for a range of traditional activities and modern modes and methods of accessing resources. Alaska public lands were set up to include for *work* and *inhabitation.* Subsistence lifestyles and culture involves more than hunting; it includes humans moving through wilderness, laboring in wilderness, and perhaps living in wilderness.

Without directly addressing how legal *wilderness* has changed, as evidenced by ANILCA, and may include not only hunting but also work and inhabitation, the conservation movement began to petition against various methods of wilderness access. Richard White points out that environmentalism has only come to peace with certain forms of *archaic work*— hiking,

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[259] Catton, *Inhabited Wilderness,* 4; Norris, *Alaska Subsistence*, 16.
[260] Catton, *Inhabited Wilderness,* 4.
[261] Norris, *Alaska Subsistence*, 16-17.
[262] Norris, *Alaska Subsistence,* 53.

trekking, hunting, fishing and other, primitive romantic ventures. White further notes that "environmentalists still withhold from modern workers—those who work with machines that depend on more than muscle or wind for their power, those who gain their livelihood from work."[263] Demonizing such allegedly inappropriate methods of work suggests that only work that takes skill and strength is rooted in the wilderness, White argues. During the early years of the park, the *Copper River Country Journal* reported that "unless a person carries a big bag of 'gorp,' sleeps in a tent, walks very softly across 'their' park, and deplores the use of traps and guns, that person is the enemy of the [Wrangell-St. Elias NPP] park rangers."[264] The subsistence clause has thus created local tension and it allowed for conservationists to approve of only certain technologies and to construct wilderness parks around the idea of archaic work or play. The journal further suggested in that order to prevent non-archaic *work* within Wrangell-St. Elias NPP, Park Rangers used "Gestapo/CIA tactics to harass innocent hunters who wandered near the park boundary."[265] These tensions are what ultimately made drafting and implementing ANILCA so complicated.[266]

In the wake of ANILCA, federal managers were left on their own to develop and implement backcountry plans. Federal policies gave a considerable amount of authority to individual parks and public land units in the early 1980s to formulate backcountry wilderness allowances, particularly regarding machines and access. In the Glacial Lake Atna area, the National Park Service and Bureau of Land Management interpreted ANILCA a bit differently and unevenly provided for rural access.

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[263] White, "Are You an Environmentalist?," 180.
[264] Bleakley, *Wrangell-St. Elias,* 45-46.
[265] Ibid.
[266] Catton, *Inhabited Wilderness,* 4; Norris, *Alaska Subsistence,* 53; Turner, *The Promise of Wilderness*, 1-15; White, "Are You an Environmentalist?," 180.

3.4. Wilderness Access

Section 701 of ANILCA designated approximately 9.6 million acres within Wrangell-St. Elias NPP as wilderness, making it the single largest designated wilderness area in the United States. The area was to be administered in accordance with the Wilderness Act (16 U.S.C. 1131-1136) and for "the use and enjoyment of the American people in such manner as will… provide the protection of these areas and the preservation of their wilderness character."[267] The federal government heavily patrols wilderness and monitors its use.

ANILCA designated approximately 8.3 million acres of Wrangell-St. Elias as a National Park and approximately 4.8 million acres as National Preserve.

[267] Wilderness Act

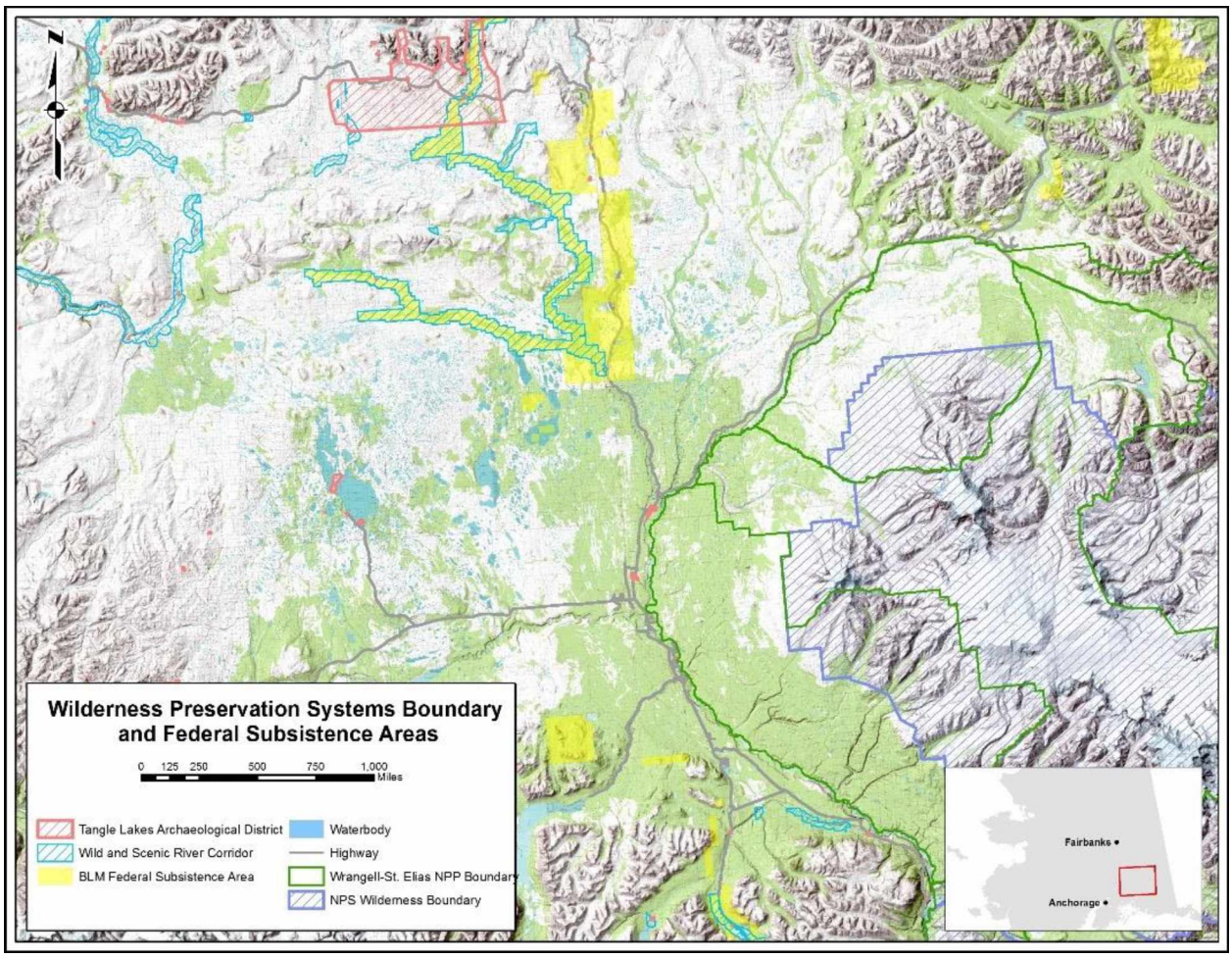

Figure 3.3 Wilderness Preservation Systems Boundary and Federal Subsistence Areas Map: Designated Wilderness areas within Wrangell-St. Elias NPP, outlined in purple, the Wild and Scenic River corridor, outlined in light blue, and the Federal Subsistence areas, in yellow.

ANILCA stipulated that national preserves were to be managed in the same manner as a national park "except that the taking of fish and wildlife for sport purposes and subsistence uses and trapping shall be allowed."[268] The NPS initially created the boundary between the park and the preserve in order to balance public interest land and provide for local residents. However, as Bleakley's *An Administrative History of Wrangell-St. Elias National Park and Preserve, Alaska*

[268] ANILCA.

points out, some of the "most bitter arguments" were born from drawing the new preserve boundary; speculations arose regarding Dall's Sheep, "a species for which the Wrangell and St. Elias Mountains were justifiably famous."[269] ANILCA drew the National Preserve boundary around the foothills of the steep Wrangell Mountains, including crags, peaks, and rocky-alpine passes within its bounds. About sixty percent of the Dall's Sheep were left in the preserve and therefore available for sport hunting.[270]

Just after incorporation into the National Park System, Wrangell-St. Elias NPP implemented ANILCA's Title VIII, Section 811 (16 U.SC 3121) in 36 CFR 12.460(a), which transformed wilderness areas by opening them to motorized access and use. Section 811 allowed the use of "other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses… within park areas except at those times and in those areas restricted or closed by the Superintendent."[271] A 2010 Wrangell-St. Elias NPP Environmental Impact Statement (EIS) identified Off-Road Vehicles (ORV) as a traditional means of accessing subsistence resources.[272] ANILCA's Title VIII Section 811(b) allowance provides that notwithstanding any other provisions of the act or other law, the secretary shall permit "appropriate use for subsistence purposes of snowmobiles, motorboats, and other means of surface transportation traditionally employed for such purpose by local residents, subject to reasonable regulation."[273] As such, local residents technically maintained the ability to travel by some forms of mechanized equipment for subsistence purposes within wilderness areas.

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[269] Bleakley, *Wrangell-St. Elias,* 27.
[270] Wilderness Act
[271] ANILCA
[272] U.S. Department of the Interior, National Park Service, Alaska, *Environmental Impact Statement Nabesna*, 3-4.
[273] ANILCA.

Indeed, a vast, historic transportation route permeates the Copper River Basin. Historically, both recreational and subsistence users traversed these trails, as did others to access private inholding and homes. However, ORVs are thousand-pound, metal ancestors of all-terrain vehicles. The use of ORVs commenced after World War II when hunters, miners, and others used surplus military vehicles for personal use and to access remote areas.[274] They have since emerged as the popular cross-country travel vehicle. Some constituents regarded ORVs as either too large or too powerful to be allowed in wilderness. In order to fight ANILCA regulation, the park insisted that subsistence users must stay on trails or within the trail corridors within Nabesna area wilderness; the only trails that extend into wilderness include the Black Mountain trails and the southern portions of the Tanada Lake Trail. The NPS has prohibited the creation of new trails in wilderness outside of these corridors. Thus, the vast majority of wilderness land remains difficult, if not impossible, to access. Furthermore, many users find the vegetation and topography to limits cross-country travel. As such, there are over 541,000 acres of wilderness inaccessible to ORV use and virtually any convenient method of access. These areas are bordered by Drop Creek to the west, the Nabesna Glacier to the east, and Mt. Sanford and Mt. Jarvis to the south.[275]

In some senses, the Park Service could not help but fall back on the traditional Park model for wilderness. Thus, in 1983, the park first began issuing permits for wilderness access (permits that could be limited or denied). Since 1986, the Park Service has conducted two significant ORV impact studies and a survey and inventory of the physical conditions of the existing trails in the park's Nabesna District, near the Copper River Glacier area. These studies found that in areas subject to ORV use, vegetation was slow to recover, soils eroded, permafrost

[274] Bleakley, *Wrangell-St. Elias,* 3.
[275] U.S. Department of the Interior, National Park Service, Alaska, *Environmental Impact Statement Nabesna*, 3-4.

depth changed, and impacts to surface hydrology occurred. Further, environmental impact and condition studies found that "ORV use over wet areas leads to trails braiding and widening…all of which impact wilderness character."[276] In 2010, the EIS for Wrangell-St. Elias NPP stated that ORV off-road use in wilderness would result in "moderate to major impacts to wilderness character associated with subsistence ORV use in designated wilderness," and "major impacts to soils, wetland, and vegetation accosted with ORV use on unimproved soils, wetlands, and vegetation associated with ORV use on unimproved trails."[277] Indeed, of the nine trails in the Nabesna District, the Tanana Lake, Copper Lake, Reeves Field, and Suslota trails were found to have substantial sections with negative impact.[278] By 2011, only non-wilderness areas allowed ORV use and only on existing trails.

The Bureau of Land Management does not oversee designated wilderness areas in Alaska; instead, it manages the Wild and Scenic River Systems as complementary wilderness conservation units to the Wilderness Preservation System. The Wild and Scenic River Systems Act of 1968 charges that eligible river systems be administered to ensure their free and unimpaired flow.[279] Section 1782 of the Federal Land Policy and Management Act (FLPMA) of 1976, which details BLM wilderness policy, does not apply to any lands in Alaska. However, in carrying out the Secretary's duties under FLPMA Sections 1711 and 1712, the BLM identified a few areas in Alaska determined to be suitable as "wild." The federal government set aside Wild and Scenic Rivers to preserve their outstanding scenic, recreational, geological, historical, and cultural values, as well as their fish and wildlife. Originally promoted as a means of countering

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[276] Ibid.
[277] U.S Department of the Interior, National Park Service, Alaska, *Environmental Impact Statement Nabesna,* 1-3.
[278] U.S Department of the Interior, National Park Service, Alaska, *Environmental Impact Statement Nabesna,* 1-3, 5.
[279] Wild and Scenic Rivers Act of October 2, 1968, 16 U.S.C § 1271-1287.

federal dam-construction programs, the 1968 Wild and Scenic Rivers Act evolved into an effort to limit development along rivers and their banks.[280] Wild and Scenic rivers or sections of rivers are to remain free from impoundments and are generally inaccessible except by trail. Leave No Trace policies ensure that wild watersheds and shorelines remain unpolluted.[281]

ANILCA designated the south-glowing Gulkana River and north-flowing Delta River as Wild and Scenic. Both rivers have their headwaters in the Tangle Lakes watershed. The Delta River watershed extends from the Upper Tangle Lakes downstream to Black Rapids and then north to join the Tanana River and eventually the Yukon River. The Gulkana River begins in the Alaska Range and flows south into the Copper River. The three forks of the Gulkana River (including Middle Fork and West Fork) comprise 181 Wild River miles and are the most extensive clearwater river system in the Copper River Basin; they drain approximately 2,140 square miles before meeting the Copper River and emptying into the Gulf of Alaska. The Gulkana River is heralded as one of the most beautiful in the state; it is also known for its prime sportfishery. Today, various salmon fishing charter businesses operate in the area. Both resident and non-resident fishing licenses are available to provide access to fishing throughout the Tangle Lakes, Gulkana River, and the main-stem of the Copper River. The BLM Alaska webpage encourages the use of these resources and details the three missions for Wild and Scenic River conservation in the state. The rivers are to be "open to everyone… they offer Americans the unique opportunity to explore and experience the landscapes that shaped our nation. Whether

[280] Dan Tarlock and Roger Tippy, "Wild and Scenic Rivers Act of 1968," *Cornell Law Review* 55, no. 707, (1970): 2. https://scholarship.law.cornell.edu/clr/vol55/iss5/4.
[281] Federal Land Policy and Management Act (FLPMA) of 1976, U.S Public Law 94-579, 90 Stat. 2743.

you fish, hike, hunt, or boat, these lands represent our way of life, a living link to the past, and our pledge to tomorrow."[282]

Even after the Tangle Lakes region was nominated to the National Register of Historic places by Frederick H. West in 1971 as a 226,600-acre area of cultural concern, the land remained relatively open to motorized use. The management approach to access on BLM lands differs from the NPS in a few ways. The 1980 BLM *Tangle Lakes Archeological District Proposed Off-road Vehicle Designation Environmental Assessment* proposed that motorized users must stay on designated trails within the Tangle Lakes area (generally Swede Lake trail to Maclaren River) only between May 17 and October 19. Outside of the above dates, motorized cross-country travel is allowed provided that there is adequate snow cover, defined as one foot of snow or six inches of ground frost. There are many designated motorized trails within the Tangle Lakes and even the Wild and Scenic corridor, including trails at Oscar Lake, Landmark Gap South, Swede Lake, and Dickey Lake. The corridor boundaries of both the Delta and Gulkana Rivers are a half-mile on either side of the shore. Within these corridors, motorized travel is allowed on designated trails. Subsistence and recreational users may cross rivers or streams only at allowable (and signed) designated crossings. There is no provision for game retrieval within the Tangle Lakes area, although hunters must retrieve animals harvested within the Wild and Scenic corridor without taking motorized vehicles off designated routes when seasonal restrictions are in effect. Additionally, paved highways, including the Denali Highway (which replaced the old Valdez Trail, as noted in Chapter Two), the Richardson Highway, and the Tok

[282] "Gulkana Wild and Scenic River," U.S Department of the Interior, Bureau of Land Management, accessed January, 2020, https://www.blm.gov/visit/gulkana-river.

Cut-Off Road wind through the Gulkana River ecosystem, making access to river recreation, fishing, and hunting relatively simple.[283]

Overall, the allowances of human activity in the Gulkana Wild and Scenic River corridor reflect the BLM's pledge to multiple-use; the National Park Service (NPS)-regulated wilderness, less than one hundred miles distant and still within the Lake Atna wilderness area, is managed with more traditional adherence to the 1964 Wilderness Act. Despite ANILCA's Title VIII, which provided for access for subsistence purposes, these two federal stewardship strategies have differently affected local resources and resource users. For instance, in 2013, the NPS Alaska State Office drafted a peer-reviewed report in order to evaluate the myriad of wilderness stewardship issues and decisions facing the agency. NPS wildlife biologist Grant Hilderbrand, in *Using Ethics Arguments to Preserve Naturalness: A Case Study of Wildlife Harvest Practices on NPS Lands in Alaska,* reported that the NPS is an "ecosystem steward" and this role extends to all "components of the ecosystem, both living and non-living, and the processes that link them."[284]

While this general description might seem to allow for human activities in wilderness implicitly, the report concludes that "harvest activities must be consistent with NPS resource mandates and the duty to maintain natural processes supersedes harvest authorizations" and that "when uncertain, [the] NPS should err on the side of conservation."[285] The harvest of black bears using bait on state and federal lands has been historically legal in Alaska and, in 2012, the State of Alaska authorized the harvest of brown bears in several preserves. Hilderbrand evaluated the

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[283] Lethcoe, *A History of Prince William Sound,* 56-60; U.S. Department of the Interior, Bureau of Land Management, Alaska, *Tangle Lakes Environmental Assessment,* 215.
[284] Grant Hilderbrand, "Using Ethics Arguments to Preserve Naturalness: A Case Study of Wildlife Harvest Practices on NPS Lands in Alaska," *Series: Alaska Park Science: Wilderness in Alaska,* vol. 13, issue 1 (U.S Department of the Interior, National Park Service, 2015): 1, https://www.nps.gov/articles/aps-v13-i1-c10.htm.
[285] Hilderbrand, "Using Ethics Arguments," 1.

potential effects of this authorization by studying historic black bear harvest records using bait in NPS wilderness. He found there was "little to no conservation concern" as hunters harvested less than two black bears per year using bait in the 55 million acres of NPS lands between 1992 and 2010. However, Hilderbrand found that the ultimate goal, "succinctly, is the preservation of populations, behaviors, and systems (that is, naturalness)" and often the question of hunting is "not even one of biology, but rather one of values."[286] Thus, "the answer rarely, if ever, lies solely in the data." In the end, the NPS has since prohibited the harvest of brown bears using bait and implemented formal closure provisions in federal statute and regulations. We must "hold the line," writes NPS wilderness expert Adrienne Lindholm, for preserving wilderness populations, lands, and waters.[287]

On the other hand, the BLM webpage reads differently. It boasts that the Gulkana Wild and Scenic River is among the top five most floated rivers in Alaska and that it is especially well-known for its spectacular sport fishing.[288] On BLM lands, managers prioritize multiple-use, including state permitted hunting and fishing, along with certain allowances for mineral extraction. In addition, the BLM Copper Basin field office in Glennallen has recently (January 2020) proposed the public sale of beetle-killed white spruce trees on over five hundred acres of BLM land between Mileposts 37 and 71 of the Richardson Highway. This area, known as the Tiekel Block, is solidly within the Lake Atna area and only a couple dozen miles west of the Wrangell-St. Elias NPP boundary and the Copper River. BLM Glennallen forester Tim Skiba notes that the sale of fuel wood "is intended to respond to numerous requests by small firewood

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[286] Ibid.
[287] Adrienne Lindholm, "Alaska Wilderness: Looking Back, Looking Ahead," *Series: Alaska Park Science: Wilderness in Alaska,* vol. 13, issue 1 (U.S Department of the Interior, National Park Service, 2015): 1, https://www.nps.gov/articles/aps-v13-i1-c3.htm.
[288] "Gulkana Wild and Scenic," U.S Department of the Interior, Bureau of Land Management.

suppliers seeking to fill the local demand for fuelwood and personal use forest products while also reducing hazardous fuels for wildfire mitigation."[289] To further illustrate the differences in management strategies that the BLM and NPS employ, it is worth noting that locals know the Tiekel Block for its superb bear bait hunting opportunities. BLM policy also allows the trapping of wolves and other fur-bearing animals. The BLM has historically been careful not to diminish the state's potential for economic growth and balances recreational, hunting, and resource extraction on federal lands.[290]

3.5. Conclusions

Frank Norris writes that the history of land use planning demonstrates the State of Alaska and the federal government have handled subsistence planning with a "startling lack of consistency."[291] This paper has similarly demonstrated that people have handled the history of wilderness, wilderness law, subsistence use, and environmental politics with a lack of consistency in the Lake Atna wilderness area. Throughout the twentieth and twenty-first centuries, federal management directives have variously cherished and demonized traditional wilderness. Jay Hammond, governor of Alaska from1974 to 1982, stated that prior to ANILCA, "there was a lot of apprehension on the part of many Alaskans that predicted all sorts of gloom and doom…. I think that Alaskans, in general, have concluded that ANILCA has provided, in

[289] "BLM Alaska Seeks Comments on Proposed Sale of Beetle-Killed Sprue Tress Near Richardson Highway," U.S. Department of the Interior, Bureau of Land Management, release date February 5, 2020, https://www.blm.gov/press-release/blm-alaska-seeks-comments-proposed-sale-beetle-killed-spruce-trees-near-richardson.
[290] Ibid.
[291] Norris, *Alaska Subsistence,* 70.

general, more benefits than it did detriments."[292] While support for ANILCA (and the NPS or BLM presence in Alaska) has increased over the years, notions of non-human "wilderness" still prevail among conservationists. However, the struggle to come to terms with inhabitation and work in wilderness has created complicated regulations between state and federal agents.

Coming to terms with work in wilderness appears to be difficult in Alaska. In both the Gulkana watershed area and in the Wrangell and St. Elias Mountains, tackling the problem of work proved to be the most enduring problem regarding ANILCA. Both the BLM's Gulkana Wild and Scenic management plan and the Wrangell-St. Elias NPP backcountry wilderness plan have undergone various iterations. Management plans have approached the questions of work and labor (in the forms of hunting, fishing, and access for those activities) with some variation. Generally, NPS management of lands has tended to err on the side of conservation, while BLM maintains its pledge for multiple-use.

In 2012, the National Park Service, on the eve of Wilderness Act bicentennial, formally reassessed wilderness and reexamined the origins of wilderness. The *Revisiting Leopold* report, so named in reference to the original report that set in motion over fifty years of complex wilderness management policy, points out that that current "environmental changes confronting the National Park System are widespread, complex, accelerating, and volatile."[293] In the twenty-first century, wilderness is threatened by a new host of challenges including biodiversity loss, climate change, habitat fragmentation, and pervasive invasive species. "These threats will tear at the fabric of the natural quality of our wilderness areas, writes Wilderness Planner Adrienne Lindholm, "and test our will to embrace restraint and humility, central tenets of wilderness

[292] U.S. Department of the Interior, National Park Service, *Alaska's Wild Legacy,* directed by Brian Jones (Alaska: Anchorage Alaska Public Lands Information Center, n.d.), DVD.
[293] Lindholm, "Alaska Wilderness," 1.

stewardship."[294] She emphasizes that it will be a challenge for environmentalism to preserve "the freedom" of wilderness: a freedom which allows nature to move wildly and for natural processes to unfold organically.

Wilderness management also emphasizes that wilderness will remain "free" from humans: free from human trammel, free from work, and free from habitation. Lindholm writes that many cherish wilderness and freedom in a different sense, however. So long as wilderness does not contain human habitation or "improper" work, is it able to exist as virtuous and important in the American mind. One of the paramount tenets of wilderness is that it furnishes "freedom from feeling like we're all under constant surveillance with the freedom to go to the natural world as a refuge—as a place apart."[295] Lindholm suggests that "this isn't the jingoistic 'freedom' that pundit politicians [prattle] . . . on about, but rather something much closer to the real, productive, pioneering freedom that—in this country, at least—has always been tied to our most fundamental ideals: independent thought, nonconformity, and the exploration of new frontiers."[296] If wilderness ceases to exist, and the last "wild" places are stopped out and fully filled with work and inhabitation, then that feeling of freedom may be irrevocably lost.

In the present era, during technological boom, therefore, the concept of technology and wilderness must be reexamined. In the 1970s, technology and motorized equipment in wilderness brought forward the problems of ORV use, firearms, and snowmachine access. Today, however, technology is accessible nearly everywhere including within National Parks, wilderness, and even afloat Wild and Scenic Rivers. In Wrangell-St. Elias NPP wilderness 4G LTE data can be found along wilderness hikes. Salmon fishermen chat away on cell phones while guiding air-

[294] Ibid.
[295] Ibid.
[296] Ibid.

boats up the Gulkana Wild and Scenic River. Perhaps, while the National Park idea should be reimagined to contain work and inhabitation, bordered and contained wilderness would have its own merits. Lindholm concludes that Wilderness Planners and the National Park Service believe that wilderness will continue to be an enduring, important resource in Alaska, especially as those areas outside of wilderness begin to look and feel increasingly different. The importance of wilderness may be underscored if the idea of archaic wilderness presses on into the twenty-second century. [297]

[297] Ibid.

Conclusions

The history of humans and nature does not have a finite "conclusion." It is innately infinite: the relationship between humans and wilderness incorporates nearly every aspect of human and non-human life on earth. This research can safely conclude that humans and nature share a long, complex history in the Glacial Lake Atna area.

As demonstrated in Chapter One, humans have lived and worked in the Glacial Lake Atna valley for upwards of 10,000 years. They left their imprint on the earth. While the Wilderness Act of 1964 proposed that wilderness is uninhabited and where any imprint of work is not noticeable, Chapter One details the archaeological record and investigates human history in wilderness. Chapters One and Two also demonstrate that we must recognize that people have lived and worked in the wilderness since prehistoric times. The primary research question of this thesis regarding whether wilderness contained *work* or *inhabitation* is answered: 1) wilderness is not, nor has it historically been, uninhabited and 2) wilderness inherently demands work; it is not a place of leisure; it is not a place devoid of human imprint; and through various activities—hunting, fishing, traveling—work and nature co-exist in wilderness. In fact, wilderness has been altered, has changed, and has been a place where people worked and lived since the beginning of human history.

Chapter Two builds upon the observations of Chapter One, investigating work in the frontier period and introduces the idea that not only does wilderness represent a modern conceptualization, but an inherently flawed one. Chapter Two further explored the second research question regarding the roots of environmentalism, stressing that the history of

wilderness must address the transformation of environments in extractive ways and that the ideas on wilderness have changed radically over time. Further, the synthesis of theoretical literature in environmental history and a survey of historical figures, naturalists, and nature writers in Alaska, reveals that the idea of wilderness results from romanticism and post-frontier ideologies. Stories from the Alaska frontier, especially those that reinforce a sense of romanticism or reiterate frontier mythology, therefore inhabit the development of a holistic approach to wilderness management.

The movement to protect wilderness in the mid-twentieth century suggested that "wilderness" was primitive, untouched, and wild. Indeed, in the late 1960s and throughout the '70s, Congress considered a flurry of Alaska lands proposals that would have added million of acred of Alaska lands to the Wilderness Preservation System. The Department of the Interior and the State of Alaska worked together to decide on the allotment of Alaska lands, and in 1980 designated over ten million acres of wilderness lands in the Copper River country. A series of complex legislative acts divided and redivided lands between State, Native, and federal claimants. Environmentalists' eagerness to protect this wilderness created friction within society, as they sought holistic conservation of wilderness areas in the image of the Wilderness Act. The conclusions from Chapter Two lead into Chapter Three's core findings and conclusion: after decades of resource management, wilderness managers conceded that re-creating "vignettes" of American wilderness is not possible.

Chapter Three specifically addresses the roots of the Alaska National Interest Lands Conservation Act (ANILCA). While support for ANILCA and the presence of the National Park Service and Bureau of Land Management in Alaska has increased since the act's passage in 1980, notions of non-human "wilderness" have prevailed among conservationists. Coming to

terms with inhabitation and work in wilderness has complicated management of BLM and NPS lands and waters, and as this thesis demonstrates, appears to be most difficult in the Glacial Lake Atna wilderness in Alaska. Chapter Three addresses how in the Gulkana watershed area and in the Wrangell and St. Elias Mountains, the BLM's Gulkana Wild and Scenic management plan and the Wrangell-St. Elias National Park and Preserve backcountry wilderness plan have undergone various iterations. Management plans have varied their approaches to work and labor (in the forms of hunting, fishing, and access for those activities). Generally, NPS management of lands has tended to err on the side of conservation, while BLM maintains its commitment to multiple-use.

Finally, Chapter Three addresses modern work and inhabitation in legal wilderness areas in Alaska. While ANILCA satisfied many of the legal arguments for wilderness, or theoretical benefits of wilderness, it also raised problems regarding living and working in Alaska wilderness lands. This chapter concludes that ANILCA's Title VIII subsistence clause has created tensions with local users, including questions surrounding the use of certain technologies and modes of access in wilderness. The Wilderness Preservation System and conservation efforts in Alaska have further allowed for conservation to approve of "archaic" work and the idea of play in wilderness, while disavowing mechanized work.

Much remains to be added to the historical record of the Glacial Lake Atna area. Indeed, with the commemoration of the National Park Service Centennial in 2016 now behind us, revisiting the origins of the Leopold Report, Wilderness Act, National Park Service Organic Act, and re-thinking wilderness are timely. While the National Park idea should be reimagined to encompass both work and inhabitation—an adage Richard White stressed was *critical*—bordered and legally designated wilderness has its own significant merits. As Adrienne Lindholm

concludes, wilderness planners and the National Park Service believe that wilderness will continue to be an enduring, important resource in Alaska, especially as those areas outside of wilderness begin to look and feel increasingly different and technologically modernized. The importance of wilderness may be especially critical in the twenty-second century in balancing the demands of traditional wilderness and inhabited wildness. Such multi-dimensional wilderness management would accommodate both archaic work as well as modern, motorized work and inhabitation.

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